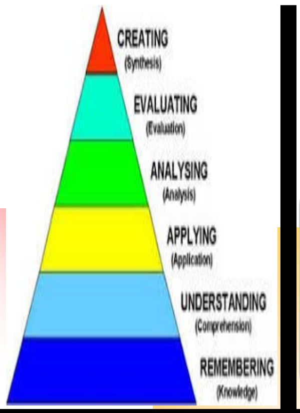

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Vol II

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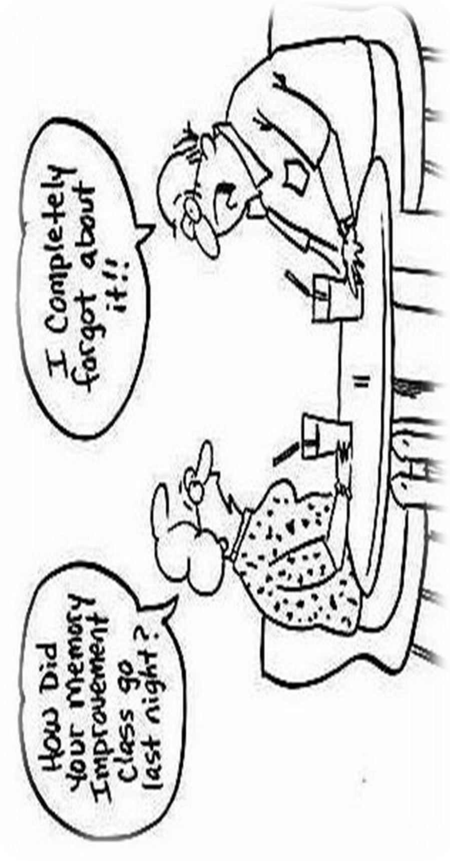
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I Completely forgot about it!!

A Study on Environmental Intelligence of Higher Secondary School Students.

Emotional Intelligence of Higher Secondary School Students in Cuddalore District.

A Study on Stress Level of Higher Secondary School Students.

A Study on Mobile Phone Usage in Relation to Academic Performance among Higher Secondary School Students.

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ISSUES ON
PEDAGOGICAL EXCELLENCE
(Vol 2)

Compilation of FOUR Dissertations of
MEd students [2018-2020] of
OPR Memorial College of Education, Vadalur – 607 303

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Issues on
Pedagogical Excellence (Vol 2)

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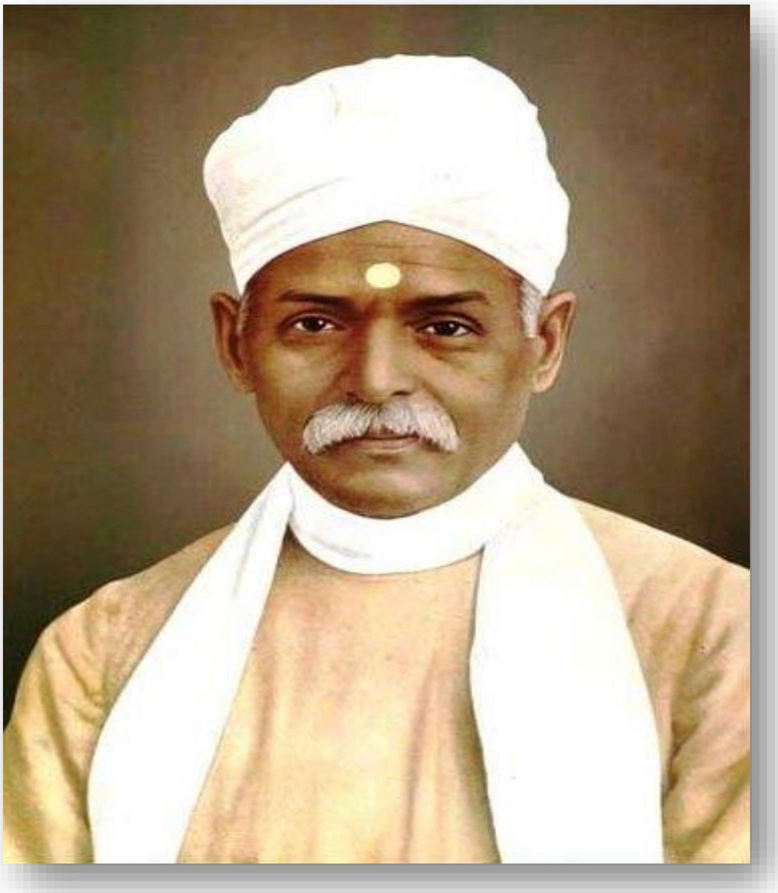

25 Dec 1861 :: 12 Nov 1946

Pandit Madan Mohan Malaviya

Dr. N.Ramakrishnan
Member Syndicate
Professor and Head
Department of Educational Technology
Tamil Nadu Teachers Education University
Chennai-600 097

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27 Aug 2020

FOREWORD

I am happy to give a foreword to the book entitled '*Issues on Pedagogical Excellence*' to be published & released by Na Subbu Reddiar 100 Educational Trust, Chennai. The book is a collection of research works [dissertations] done by M.Ed. students [OPR Memorial College of Education, Vadalur – 607 303] on the various topics namely personality patterns of higher secondary teachers, conflict management of higher secondary students, higher secondary teachers' attitude towards classroom teaching, gender inequality in educational institutions, environmental intelligence of higher secondary students, emotional intelligence of higher secondary students, stress level of higher secondary students and mobile phone usage in relation to academic performance among higher secondary students. The book has discussed the results of the study. It is presenting the practical suggestions and implications to educators. I hope this is a good attempt. It will be a record for future teachers to take a leaf out of it for their projects. I wish the book to be in every one's library. I congratulate all for this wonderful endeavor.

Dr N Ramakrishnan
~~~~~~

பதிப்புரை

பேராசிரியர் முனைவர் ந சுப்பு ரெட்டியார் அவர்கள் எளிய வேளாண் குடியில் பிறந்து, தன் முயற்சியால் பயின்று, ஆசிரியராக தொடங்கிப் பேராசிரியர் வரை உயர்ந்தவர். திருப்பதி திருவேங்கடவன் பல்கலைக்கழகத்தில் தமிழ்த்துறையை உருவாக்கி அதன் தலைவராகப் பணியாற்றியவர். பல பல்கலைக்கழகங்களில் சிறப்புநிலைப் பேராசிரியராகத் திகழ்ந்தவர்.

பண்டையத் தமிழ்க்கல்வி மரபில் வேரூன்றி, நவீனக் கல்விப் பயிற்றல் முறைகளில் தேர்ந்தவர். பல ஆய்வாளர்களை உருவாக்கியவர். வாழ்நாள் முழுவதும் எழுத்தும், பேச்சுமாக வாழ்ந்தவர். **136 [135 +1]** நூல்களைப் படைத்துப் பன்முக ஆளுமையாக மிளிர்ந்தவர்.

அன்னாரின் நூற்றாண்டு (2015 – 2016) 108 நிகழ்வுகளாக தமிழகமெங்கும் மிகச் சிறப்பாக கொண்டாடப் பெற்றது.

பேராசிரியரின் நூற்றாண்டில் (2015 – 2016) நூற்றாண்டுக்குழு தமிழகமெங்கும் நடத்திய 108 நிகழ்வுகள் அகில இந்திய சாதனையாக அங்கீகரிக்கப் பெற்றுள்ளன. நூற்றாண்டில் பேராசிரியரின் தமிழ்த்திறத்தையும், அறிவுநுட்பத்தையும் வெளிக்கொணரும் பொருட்டு பன்னிரெண்டு நூட்கள் வெளியிட்டப்பெற்றன. அவரது 120 நூல்கள், இந்திய அரசு நல்கிய **ISBN** எண்களுடன், மின் நூல்களாக மாற்றுப்பெற்று https://archive.org/details/@centenary1916nsr2016 என்ற இணைதளத்தில் அனைவரும் பதிவிறக்கம் செய்யும் வகையில் அமைக்கப்பெற்றுள்ளன.

பேராசிரியரின் படைப்பான “*கவிஞர் வாலியின் இராமாநுஜ காவியம் – ஒரு மதிப்பீடு*” எனும் நூலை பேராசிரியரின் நூற்றாண்டிற்குப் பின்பும் (102வது), இராமாநுஜரின் ஆயிரமாண்டிற்குப் பின்பும் (1002வது) நூற்றாண்டுக்குழு 2018ல் வெளியிட்டது.

பேராசிரியரின் நூட்களை அடித்தளமாக்கொண்டு சுமார் 25 முதுகலைப்பட்ட மாணாக்கர்கள், ஆய்வியல் நிறைஞர் மாணாக்கர்கள் மற்றும் முனைவர் பட்ட ஆய்வாளர்கள் பல்வேறு பல்கலைக் கழகங்களில் (சென்னைப் பல்கலைக்கழகம், மதுரை காமராஜ் பல்கலைக்கழகம், பாரதிதாசன் பல்கலைக்கழகம், மனோன்மணியம் சுந்தரனார் பல்கலைக்கழகம், அழகப்பா

பல்கலைக்கழகம் மற்றும் தமிழ்நாடு ஆசிரியர் கல்வியியல் பல்கலைக்கழகம்) ஆய்வு மேற்கொண்டு வருகின்றனர்.

மூன்று முனைவர் பட்ட ஆய்வாளர்கள் ஆய்வு மேற்கொண்டு, சென்னை பல்கலைக் கழகம், மதுரை காமராஜ் பல்கலைக் கழகம் மற்றும் பாரதியார் பல்கலைக் கழகம் ஆகியவற்றில் ஆய்வேடு சமர்ப்பித்து முனைவர் பட்டம் பெற்றுள்ளனர். ஐந்து முதுகலை பட்ட மாணாக்கர்கள் (திராவிடப் பல்கலைக் கழகம் : 2017 – 2019) ஆய்வேடு சமர்ப்பித்துள்ளனர். ஐந்து ஆய்வியல் நிறைஞர் மாணாக்கர்கள் (தமிழ்ப் பல்கலைக் கழகம் : 2018 – 2019) ஆய்வேடு சமர்ப்பித்து ஆய்வியல் நிறைஞர் பட்டம் பெற்றுள்ளனர்.

OPR நினைவு கல்வியியல் கல்லூரி (தமிழ்நாடு ஆசிரியர் கல்வியியல் பல்கலைக்கழகம்) பரிந்துரைத்த எட்டு முதுகலை பட்ட (MEd) மாணாக்கர்கட்கு **ந சுப்பு ரெட்டியார் 100 கல்வி அறக்கட்டளை NSR100 Kamatchi Ammal Fellowship** வழங்கியது.

திறனாய்வு செய்த மாணாக்கர்கள்:

Ms KS Afrin Begum [1040918MD001]
Ms L Bhuvaneswari [1040918MD002]
Ms K Kavitha [1040918MD004]
Ms L Ramalakshmi [1040918MD005]

ஆய்வேட்டின் தலைப்புகள்:

A Study on Environmental Intelligence of Higher Secondary School Students.

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A Study on Mobile Phone Usage in Relation to Academic Performance among Higher Secondary School Students.

இவ்வாறு சமர்ப்பிக்கப்பெற்ற ஆய்வேடுகள் தொகுக்கப்பெற்று

Issues on
PEDAGOGICAL EXCELLENCE (VOL 2)

Compilation of FOUR Dissertations of
MEd students [2018-2020] of
OPR Memorial College of Education, Vadalur – 607 303

எனும் நூலாக வெளியிடப் பெறுகின்றது. நூலின் ஒரு படி ஒவ்வொரு மாணாக்கர்கட்கும், 5 படிகள் கல்லூரிக்கும் வழங்கப்பெறுகின்றன.

நூற்றாண்டுக்குழு

பொருளடக்கம்

OPR Memorial College of Education
(Tamil Nadu Teachers Education University)
MEd students' (2018-2020) Dissertations

Compilation of Dissertations submitted by the Recipients of **'NSR100 Kamatchi Ammal Fellowship'** provided by **Na Subbu Reddiar 100 Educational Trust** in the OPR Memorial College of Education, Vadalur – 607 303, Tamil Nadu

வ.எண்	**Student (Reg. No.), Dissertations**
01	Ms KS Afrin Begum [1040918MD001] A Study on Environmental Intelligence of Higher Secondary School Students.
02	Ms L Bhuvaneswari [1040918MD002] Emotional Intelligence of Higher Secondary School Students in Cuddalore District.
03	Ms K Kavitha [1040918MD004] A Study on Stress Level of Higher Secondary School Students.
04	Ms L Ramalakshmi [1040918MD005] A Study on Mobile Phone Usage in Relation to Academic Performance among Higher Secondary School Students.

A Study on Environmental Intelligence of Higher Secondary School Students

Ms KS Afrin Begum

A STUDY ON ENVIRONMENTAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS

Dissertation Submitted To
TAMILNADU TEACHERS EDUCATION UNIVERSITY
In partial Fulfillment of the requirements
For the degree of

MASTER OF EDUCATION

Submitted by
AFRIN BEGUM.K.S
(Reg. No 1040918MD001)

Under the Guidance of
Dr. D. PONMOZHI

Principal

O.P.R. Memorial College of Education, Vadalur

O.P.R. MEMORIAL COLLEGE OF EDUCATION

Affiliated to Tamil Nadu Teachers Education University – Chennai-97
VADALUR-607 303
2018-2020

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Place: Vadalur **AFRIN BEGUM. K. S**

Date:

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Chapter I

Introduction

CHAPTER – 1

INTRODUCTION

1.1 INTRODUCTION

Environmental intelligence is the integration of environmental and sustainability research with data science, artificial intelligence and cutting-edge digital technologies to provide the meaningful insight to address these challenges and mitigate the effects of environmental change. The relationship between the man and the environment has been established in the early period itself. Human-beings live in the kingdom of nature and interact with it constantly. Our changing environment presents a series of inter-related challenges that will affect everyone’s future health, safety and prosperity. There exists a close relationship between man and environment. On the one hand man is born in environment and establishes harmony with environment. On the other hand man tires to control his environment and change it according to his requirements. Hence it requires an understanding of the environment of which man is a part.

In today's psychological landscape, intelligence can be very generally defined as the capacity to learn from experiences and adapt to one's environment and also to protect it for the future generations. Thus environmental intelligence will help an individual or organization or the government to take correct decisions at a correct time. Students are future citizens of the nation. And education is an important social instrument and means, which act as a catalyst in improvement of different aspects of life. So it is most important to develop proper environmental intelligence among the young minds to save our mother earth by using it in a correct way.

THEORITICAL BACKGROUND

1.2 MEANING OF ENVIRONMENT:

The term environment has been derived from a French word “Environia” means to surround. It refers to both abiotic (physical or non-living) and biotic (living) environment. The word environment means surroundings, in which organisms live. Environment and the organisms are two dynamic and complex component of nature. Environment regulates the life of the organisms including human beings. Human beings interact with the environment more vigorously than other living beings. Ordinarily environment refers to the materials and forces that surrounds the living organism.

Environment is the sum total of conditions that surrounds us at a given point of time and space. It is comprised of the interacting systems of physical, biological and cultural elements which are interlinked both individually and collectively. Environment is the sum total of conditions in which an organism has to survive or maintain its life process. It influences the growth and development of living forms.

1.3 DEFINITION OF ENVIRONMENT:

1. According to P. Gisbert “Environment is anything immediately surrounding an object and exerting a direct influence on it.”

2. According to E. J. Ross “Environment is an external force which influences us.”

Thus, environment refers to anything that is immediately surrounding an object and exerting a direct influence on it. Our environment refers to those thing or agencies which though distinct from us, affect our life or activity. The environment by which man is surrounded and affected by factors which may be natural, artificial, social, biological and psychological.

1.4 COMPONENTS OF ENVIRONMENT:

Environment mainly consists of atmosphere, hydrosphere, lithosphere and biosphere. But it can be roughly divided into two types such as (a) Micro environment and (b) Macro environment. It can also be divided into two other types such as (c) Physical and (d) biotic environment.

a) Micro environment refers to the immediate local surrounding of the organism.
b) Macro environment refers to all the physical and biotic conditions that surround the organism externally.
c) Physical environment refers to all abiotic factors or conditions like temperature, light, rainfall, soil, minerals etc. It comprises of atmosphere, lithosphere and hydrosphere.
d) Biotic environment includes all biotic factors or living forms like plants, animals, Micro-organisms.

1.5 TYPES OF ENVIRONMENT:

1) Natural environment
2) Man-made environment

1.6 NATURAL ENVIRONMENT:

The natural environment encompasses all living and non-living things occurring naturally, meaning in this case not artificial. The term is most often applied to the Earth or some parts of Earth. This environment encompasses the interaction of all living species, climate, weather and natural resources that affect human survival and economic activity. The concept of the natural environment can be distinguished as components:

- Complete ecological units that function as natural systems without massive civilized human intervention, including all vegetation, microorganisms, soil, rocks, atmosphere, and natural phenomena that occur within their boundaries and their nature.
- Universal natural resources and physical phenomena that lack clear-cut boundaries, such as air, water, and climate, as well as energy, radiation, electric charge, and magnetism, not originating from civilized human actions.

Earth science generally recognizes four spheres, the lithosphere, the hydrosphere, the atmosphere, and the biosphere as correspondent to rocks, water, air, and life respectively.

Oceans

An ocean is a major body of saline water, and a component of the hydrosphere. Approximately 71% of the surface of the Earth (an area of some 362 million square kilometers) is covered by ocean, a continuous body of water that is customarily divided into several principal oceans and smaller seas. More than half of this area is over 3,000 meters (9,800 ft) deep.

Rivers

A river is a natural watercourse, usually freshwater, flowing toward an ocean, a lake, a sea or another river. A few rivers simply flow into the ground and dry up completely without reaching another body of water. The water in a river is usually in a channel, made up of a stream bed between banks.

Lakes

A lake is a terrain feature, a body of water that is localized to the bottom of basin. A body of water is considered a lake when it is inland, is not part of an ocean, and is larger and deeper than a pond.

Ponds

A pond is a body of standing water, either natural or man-made, that is usually smaller than a lake. A wide variety of man-made bodies of water are classified as ponds, including water gardens designed for aesthetic ornamentation, fish ponds designed for commercial fish breeding, and solar ponds designed to store thermal energy.

Human impact on water

- Humans impact the water in different ways such as modifying rivers (through dams and stream channelization), urbanization, and deforestation.
- These impact lake levels, groundwater conditions, water pollution, thermal pollution, and marine pollution. Humans modify rivers by using direct channel manipulation.
- Dams can usefully create reservoirs and hydroelectric power. However, reservoirs and dams may negatively impact the environment and wildlife. Dams stop fish migration and the movement of organisms downstream.
- Deforestation may cause flooding, declining stream flow, and changes in riverside vegetation. The changing vegetation occurs because when trees cannot get adequate water they start to deteriorate, leading to a decreased food supply for the wildlife in an area.

1.7 ATMOSPHERE:

The atmosphere of the Earth serves as a key factor in sustaining the planetary ecosystem. The thin layer of gases that envelops the Earth is held in place by the planet's gravity. Dry air consists of 78% nitrogen, 21% oxygen, 1% argon and other inert gases, and carbon dioxide. The remaining gases are often referred to as trace gases. The atmosphere includes greenhouse gases such as carbon dioxide, methane, nitrous oxide, and ozone. Filtered air includes trace amounts of many other chemical compounds.

1.8 LAYERS OF THE ATMOSPHERE

Earth's atmosphere can be divided into five main layers. These layers are mainly determined by whether temperature increases or decreases with altitude. From highest to lowest, these layers are:

- Exosphere
- Thermosphere
- Mesosphere
- Stratosphere
- Troposphere

Climate

Climate is the long-term average of weather, typically averaged over a period of 30 years. Some of the meteorological variables that are commonly measured are temperature, humidity, atmospheric pressure, wind, and precipitation. In a broader sense, climate is the state of the components of the climate system, which includes the ocean and ice on

Earth. The climate of a location is affected by its latitude, terrain, and altitude, as well as nearby water bodies and their currents. More generally, the "climate" of a region is the general state of the climate system at that location at the current time.

Weather:

Weather is the state of the atmosphere, describing for example the degree to which it is hot or cold, wet or dry, calm or stormy, clear or cloudy. Weather refers to day-to-day temperature and precipitation activity, whereas climate is the term for the averaging of atmospheric conditions over longer periods of time.

1.9 ECOSYSTEM

An **Ecosystem** is a community of living organisms in conjunction with the nonliving components of their environment, interacting as a system. These biotic and abiotic components are linked together through nutrient cycles and energy flows. Energy enters the system through photosynthesis and is incorporated into plant tissue. By feeding on plants and on one another, animals play an important role in the movement of matter and energy through the system. They also influence the quantity of plant and microbial biomass present. By breaking down dead organic matter, decomposers release carbon back to the atmosphere and facilitate nutrient cycling by converting nutrients stored in dead biomass back to a form that can be readily used by plants and other microbes.

Ecosystems are controlled by external and internal factors. External factors such as climate, parent material which forms the soil and topography, control the overall structure of an ecosystem but are not themselves influenced by the ecosystem. Unlike external factors, internal factors are controlled, for example, decomposition, root competition, shading, disturbance, succession, and the types of species present.

1.10 MAN-MADE ENVIRONMENT:

A man-made environment is referred to as the surroundings made by humans to provide facilities for satisfying human needs. These surroundings are made to have a place for people to do jobs or live or even educate other people and also recreating requirements for the concerned people's day to day needs. It contains man-made objects such as buildings, parks, transport, bridges, roads, monuments, books, furniture, etc…

1.11 MAJOR IMPACTS ON ENVIRONMENT:

1. Ozone Depletion, Greenhouse Effect and Global Warming:

All the three physical phenomena are related to one another to a great extent. To understand their effect on environment, we must first of all know what their meaning, interrelationship and working is.

Ozone is a form of oxygen, which is away from the earth's surface at a height of about 20 to 30 km in the atmosphere. It is scattered in the stratosphere in the form of a layer about three millimeter thick. This layer works as a shield to protect the earth against the ultraviolet radiation that comes from the sun.

Near the earth's surface, ozone is an increasingly troublesome pollutant but it is also as important to life as oxygen itself. If this layer disappears or thins, all terrestrial life will be annihilated. The thinning and depletion of the ozone layer has generated global concern during the last few years.

The phenomenon commonly known as ‘greenhouse effect’ occurs due to the emission of certain gaseous pollutants (methane, CFCs, water vapour and carbon dioxide are known as greenhouse gases) in the air which after the heating of the atmosphere causes the average global temperature to rise. This is known as ‘global warming’. The consequences of global warming are likely to be very devastating and disturbing. Among other things, sea levels will rise as a result of melting of glaciers at the poles and the oceans will warm and expand.

It is not a local, regional or national problem but a global problem and requires solution at the global level itself.

2. Desertification:

There is no environmental problem in the world that affects people, especially poor people, as extensively as land degradation or desertification. UNCOD defines desertification as ‘the diminution or destructing of the biological potential of land, which can ultimately led to the desert-like conditions’. The causes of desertification are numerous.

However, the important ones include climate change, overgrazing, deforestation and expansion of agriculture. About 35 per cent of the earth’s area (about 6.1 billion hectares) and 900 million people are affected by the problem of desertification. Desertification leads to loss of vegetation which forces men to migrate for their livelihood while the women are left behind to struggle on.

3. Deforestation:

The human pressure on forests has significantly increased in recent decades. The main cause of deforestation is commercial exploitation of forests. Besides this, as a part of developmental drive, large dams are constructed across many rivers thereby destroying forests. The forests play a pivotal role in balancing the ecosystem or, in other words, in maintaining the oxygen and carbon balance of the earth. Forests have a multiple ecological role to play which affects all types of life in a variety of ways.

They thwart the dangers of cloud drifting, soil erosion, floods, wind erosion and groundwater evaporation. They also protect a wide variety of flora and fauna, provide recreation and can effectively control air pollution. Deforestation destroys symbiotic relationship between ecological infrastructure and animal and human species also.

4. Loss of Biodiversity:

Today, the extinction of several species or loss of biodiversity is a much debated issue among the environmentalists at international level. Many species are disappearing rapidly.

All the species are the integral part of ecosystem and extinctions of some species threatens the balance of ecosystem, and also diminishes the well-being of the remaining species, including human beings. Our earth’s biodiversity provides varied sources of food and medicinal plants.

The main causes identified for the loss of biological diversity are:

i. Habitat loss, fragmentation and modification;
ii. Overexploitation of resources; and
iii. Chemical fertilizers, pesticides and oil pollution.

5. Disposal of Wastes:

The high energy consumption and high population densities of the urban societies give rise to large quantities of waste water and sewage as well as household rubbish. Industrialization and urbanization are the main causes of domestic, industrial and nuclear wastes. The industrial waste consists of chemicals, detergents, metals and synthetic compounds besides the solid waste and garbage.

1.12 POLLUTION

It is unenthusiastic or uncontrolled contamination of limited natural resources is available for safe storage of living beings, including human beings. The detrimental effect is harmful for healthy survival and pollution in most cases not fully reversible. It can also define as the contamination of the natural environment with polluting substances dangerous to human health and animal health.

Pollution is a dramatic growth in all countries as a result of the increase in human activities associated with modern technology and an increase in the population. Even the daily living conditions are high factors ends when the contamination of any kind. Pollution is a health risk, undermine the wilderness and make the planet dangerous for future human survival. This technology and the desire for the development give greater pollution, but the measures taken to control or reduction is very modest.

What are pollutants?

Every material producing pollution is called the polluting substances. Pollutants might consist of any biological or biochemical likewise dust, grit, etc. materials, biotic element or product or corporal representatives released deliberately man in the environment in such a concentration that may have adverse, harmful or unpleasant consequences. The pollutant can be also defining as each solid, liquid or gaseous material as a concentration as tended to be harmful to the environment.

1.13 TYPES OF POLLUTION:

Water pollution:

Water pollution in the case of pollutants likewise particles, chemicals, or water contaminated are discharged directly or indirectly into the waters without adequate treatment to get rid of harmful substances.

Causes and effects of water pollution

- Industrial waste.
- Sewage and waste water.
- Acid rain.
- Animals waste.

Preventive measures of water pollution

- Sewage treatment.
- Prevent river water to get polluted.
- Treatment plants.
- Keep the pond water clean and safe.
- Self-hygiene.

Air pollution:

Air Pollution is the harmful substances including particulate matter and biological molecules on earth in's atmosphere which can cause the disease, allergies, or the death of people can also damage other living organisms.

Causes and effects of air pollution

- Burning of fossil fuels.
- Exhaust from Industries/Factories.
- Mining operators.
- Indoor Air pollution

Preventive measures of air pollution:

- Use renewable energy.
- Protect forest and grow more trees.
- Use of solar electric vehicles.
- Proper vehicle maintains.

Soil pollution:

Soil pollution is when people introduce harmful objects, chemicals, or directly or indirectly in the territory of in such a way as to avoid injury to other living things or damage the soil or water ecosystems.

Causes and effects of soil pollution:

- Use of inorganic fertilizers.
- Industrial pollution.
- Inferior irrigation practices.
- Disposal of solid waste.
- Urban activities.

Preventive measures of Soil pollution:

- Go organic.
- Proper farming.
- Dispose of household waste.
- Manage industrial waste.

1.14 DISASTER:

Disaster, as defined is a serious disruption of the functioning of a community or society, which involve widespread human, material, economic or environmental impacts that exceed the ability of the affected community or society to cope using its own resources. The combination of hazards, vulnerability and inability to reduce the potential negative consequences of risk results in disaster.

(VULNERABILITY+ HAZARD) / CAPACITY = DISASTER

1.15 TYPES OF DISASTERS:

NATURAL DISASTER:

According to the International Federation of Red Cross & Red Crescent Societies Natural Disasters are naturally occurring physical phenomena caused either by rapid or slow onset events that have immediate impacts on human health and secondary impacts causing further death and suffering. These disasters can be:

- Geophysical (e.g. Earthquakes, Landslides, Tsunamis and Volcanic Activity)
- Hydrological (e.g. Avalanches and Floods)
- Climatological (e.g. Extreme Temperatures, Drought and Wildfires)
- Meteorological (e.g. Cyclones and Storms/Wave Surges)
- Biological (e.g. Disease Epidemics and Insect/Animal Plagues)

Natural Disasters in relation to their magnitude or intensity, speed of onset, duration and area of extent e.g. earthquakes are of short duration and usually affect a relatively small region whereas droughts are slow to develop and fade away and often affect large regions

MAN-MADE DISASTERS:

Man-Made Disasters as viewed by the International Federation of Red Cross & Red Crescent Societies are events that are caused by humans which occur in or close to human settlements often caused as a results of Environmental or Technological Emergencies. This can include:

- Environmental Degradation

- Pollution
- Accidents (e.g. Industrial, Technological and Transport usually involving the production, use or transport of hazardous materials)

COMPLEX EMERGENCIES:

Some disasters can result from multiple hazards, or, more often, to a complex combination of both natural and man-made causes which involve a break-down of authority, looting and attacks on strategic installations, including conflict situations and war. These can include:

- Food Insecurity
- Epidemics
- Armed Conflicts
- Displaced Populations

According to ICRC these Complex Emergencies are typically characterized by:

- Extensive Violence
- Displacements of Populations
- Loss of Life
- Widespread Damage to both Societies and Economies
- Need for Large-scale, Humanitarian Assistance across Multiple Agencies
- Political and Military Constraints which impact or prevent Humanitarian Assistance
- Increased Security Risks for Humanitarian Relief Workers

PANDEMIC EMERGENCIES:

Pandemic is an epidemic of infectious disease that has spread across a large region, which can occur to the human population or animal population and may affect health and disrupt services leading to economic and social costs. Pandemic Emergencies may occur as a consequence of natural or man-made disasters. These have included the following epidemics:

Ebola, Zika, Avian Flu, Cholera, Dengue Fever, Malaria, Yellow Fever, Coronavirus Disease (COVID-19)

1.16 ASPECTS OF DISASTER MANAGEMENT:

Disaster prevention: “The outright avoidance of adverse impacts of hazards and related disasters”.

Disaster preparedness: "The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions".

Disaster Response/ Relief: "The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected". It includes Rescue, Relocation, Provision Food and Water, Provision Emergency Health Care, Prevention of Disease and Disability, Repairing Vital Services e.g. Telecommunications, Transport & Provision Temporary Shelter.

Disaster Recovery: Disaster Recovery refers to those programmes which go beyond the provision of immediate relief to assist those who have suffered the full impact of a disaster.

1.17 MEANING OF INTELLIGENCE

Intelligence means the product resulting from the collection, processing, integration, analysis, evaluation and interpretation of available information concerning foreign countries or areas.

It also includes the information and knowledge about an adversary obtained through observation, investigation, analysis, or understanding.

At various points throughout recent history, researchers have proposed some different definitions of intelligence. While these definitions can vary considerably from one theorist to the next, current conceptualizations tend to suggest that intelligence is the ability to:

- **Learn from experience**: The acquisition, retention, and use of knowledge is an important component of intelligence.
- **Recognize problems**: To put knowledge to use, people must be able to identify possible problems in the environment that need to be addressed.
- **Solve problems**: People must then be able to take what they have learned to come up with a useful solution to a problem they have noticed in the world around them.

Intelligence involves some different mental abilities including logic, reasoning, problem-solving, and planning.

1.18 INTELLIGENCE – DEFINITIONS:

“An intelligence is the ability to solve problems, or to create products, that are valued within one or more cultural settings.” H. Gardner

“Sensation, perception, association, memory, imagination, discrimination, judgment and reasoning.” N. E. Haggerty

“Intelligence is part of the internal environment that shows through at the interface between person and external environment as a function of cognitive task demands.” R. E. Snow

“The capacity to inhibit an instinctive adjustment, the capacity to redefine the inhibited instinctive adjustment in the light of imaginally experienced trial and error, and the capacity to realise the modified instinctive adjustment in overt behavior to the advantage of the individual as a social animal.” L. L. Thurstone

“A global concept that involves an individual’s ability to act purposefully, think rationally, and deal effectively with the environment.” D. Wechsler

1.19 DEFINITION OF ENVIRONMENTAL INTELLIGENCE:

Environmental intelligence is defined as the actionable (i.e., decision-quality) information created by collecting (measuring/observing), compiling, exploiting, analyzing data to characterize the state of the environment at a given location or spatial region and time (past, present, future)

1.20 MEANING OF ENVIRONMENTAL INTELLIGENCE:

Environmental intelligence is a system through which information about a particular region or process is collected for the benefit of decision makers through the use of more than one inter-related source.

Simply, environmental intelligence is the most accurate and timely information available about our planet that enables governments, communities, companies and individuals to make sound decisions – decisions that save lives; protect and grow the economy; strengthen national security; and improve quality of life. Environmental intelligence is a result of a critical supply chain that begins with science and observations – ground sensors, ocean buoys, stream gauges, satellites, etc. – and ends with actionable information that allows decision-makers to better respond and adapt to a changing planet.

1.21 ENVIRONMENTAL INTELLIGENCE CYCLE:

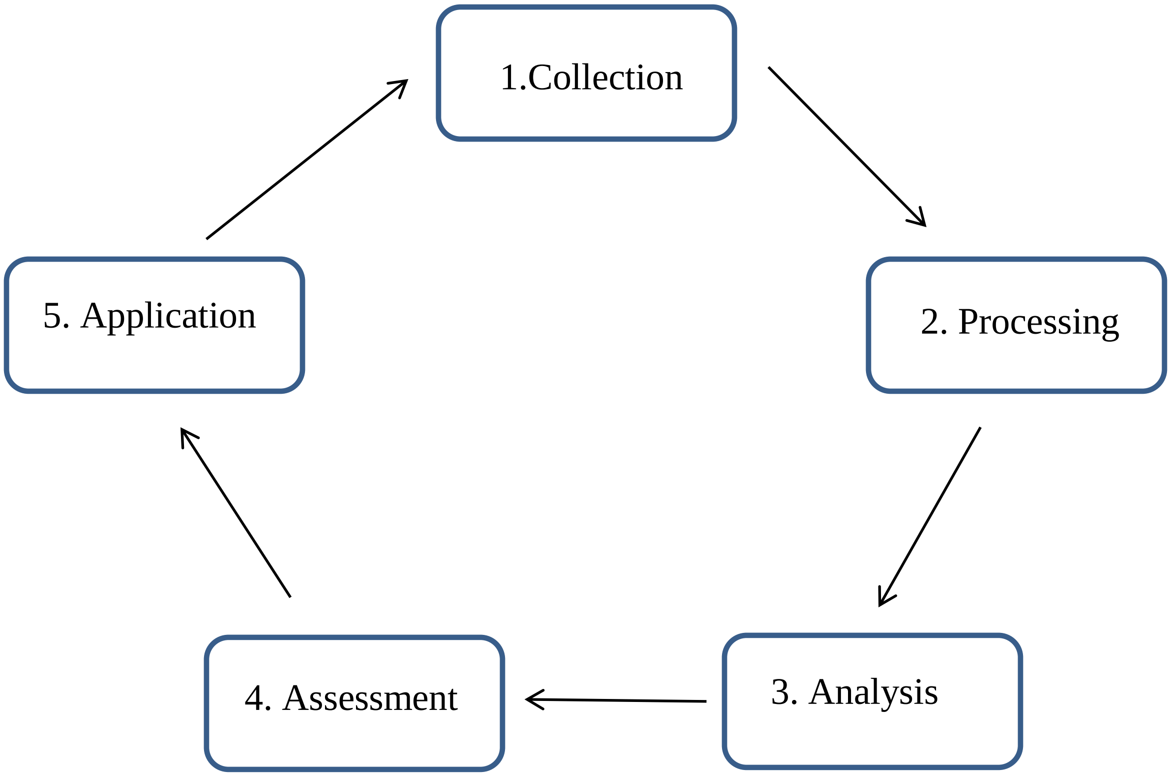

Figure – 1.1

The above figure 1.1 represents the steps involved in the environmental intelligence cycle.

1.22 IMPORTANCE OF ENVIRONMENTAL INTELLIGENCE:

Whether its government officials responding to the Deep water Horizon oil spill, an energy company trying to better manage its resources to meet customer demands during a heat wave or cold blast, or emergency workers responding to a hurricane or earthquake, environmental intelligence is vital to local, national and global decision-making.

But such decisions are made difficult, sometimes impossible, when the U.S. environmental information supply chain is weak or threatened, and essential environmental intelligence isn’t available or easily accessed. When, for example:

- Ocean observations are too sparse to estimate the amount of oil spilled;
- Computing capabilities are insufficient to run sophisticated climate models;
- Earth-observing satellites are operating beyond their expected lifetime and replacements are either not ready or not planned, creating a loss or gap in vital data;
- Data isn’t accessible or formatted in ways that allow easy integration with other datasets for use in models and decision-support tools;
- Some essential data (e.g., long-term global carbon measurements) isn’t available at all;
- Critical information doesn’t reach the right people, or when it does, it is not understood;
- Federal environmental information capabilities don’t meet the requirements of a growing and diverse user base, which demands more of an operations and applications focus in addition to traditional science needs; and when
- No long-term national strategy exists to ensure the U.S. has the tools and technologies it needs – today and in the future – to best protect its citizens and grow its economy.

Consider that these decisions are becoming even more critical and complicated as the potential, and in some cases already occurring, consequences of climate change threaten an increase in extreme weather and an unprecedented strain on our resources.

1.23 SIGNIFICANCE OF THE STUDY:

The knowledge of environment increases the level of environmental intelligence where they are living. The students should develop environment friendly behavior and practice during their lifetime. Low level of environmental intelligence is an indicator of future poor environmental status which could make our earth unfit for living. High level of environmental intelligence should be developed among school children in order to preserve the earth from its sufferings. Young minds will not forget soon. The study will reveal the current status of the higher secondary school students regarding the level of environmental intelligence. So it is essential to assess the level of environmental intelligence of higher secondary school students.

1.24 NEED OF THE STUDY:

Environmental intelligence is also the ability to turn data into knowledge and apply this knowledge to advance our understanding of interactions between humans and our environments. We need this so we can make decisions that are more ecologically sound and sustainable in areas like energy production, agriculture and urban planning. We need this to get better at shaping our environments and solving environmental problems. By studying the natural environment, the students can better understand the subject matter in school as well as to foster a love of nature, to preserve and maintain the awareness of the environment, participate in tackling environmental damage and pollution as well as keep the preservation of natural resources, conserve ecology and geology. The protection and conservation of environment is in the hands of citizens in the nation.

The students are the future nation. So the researcher wants to study the level of environmental intelligence of higher secondary school students.

1.25 STATEMENT OF PROBLEM:

The problem of the study has been stated as "A STUDY ON ENVIRONMENTAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS".

1.26 OPERATIONAL DEFINITIONS:

Environmental Intelligence:

Environmental intelligence is defined as the score obtained by the Environmental Intelligence Assessment Scale.

Higher Secondary school students:

Higher Secondary School students are those who studying in 11th Standard and 12th Standard in Government or Private or Aided Higher Secondary schools.

1.27 OBJECTIVES OF THE STUDY:

1. To assess environmental intelligence of higher secondary school students.
2. To identify the relationship between environmental intelligence and its sub samples.
3. To find predictor of environmental intelligence.
4. To determine the dominant factors of environmental intelligence.

1.28 HYPOTHESES OF THE STUDY:

The following hypotheses have been formulated on the basis of the objectives of the present study.

1. The environmental intelligence of higher secondary school students is same.
2. There is no significant relationship between environmental intelligence of students and their personal variables.
3. There is no predictor for environmental intelligence of higher secondary school students.
4. There is no dominant factor for environmental intelligence of higher secondary school students.

1.29 METHODOLOGY

The successful outcome of a research is mainly depends upon the proper selection of the research tool. So the researcher used Descriptive Research Method.

a) TOOLS USED:

The Environmental Intelligence Assessment Scale constructed and standardized by Dr.D.Ponmozhi and K.S.Afrin Begum (2020) is used in this present study. The scale contains 26 items in five point scale. The scale has four dimensions like Recycling, Pollution, Natural resources, Daily habits.

b) POPULATION:

The students studying higher secondary schools situated in Cuddalore district are considered as population of the study.

c) SAMPLE

154 Higher Secondary studying in three different schools are selected through random sampling technique.

d) STATISTICAL TECHNIQUES:

The statistical techniques were used for the analysis and interpretation of data.

Descriptive analysis:

1. Measure of Central Tendency (mean).
2. Measure of Variability (Standard Deviation)

Inferential analysis:

1. ‘T’ Test
2. ‘F’ Test

Multiple correlation and regression analysis.

1.30 LIMITATION OF THE STUDY:

The main limitations of the study are as follows:

1. There are many methods for measuring the environmental intelligence of higher secondary school students. Simple questionnaire method is used.
2. 154 respondents were considered for the research work.
3. The sample was collected from higher secondary school students.
4. The sample was collected from Cuddalore district.
5. Samples are taken from government, aided and self-financing schools.
6. Data collected from both in Tamil and English medium.

1.31 CHAPTERIZATION

Chapter II contains a Review of Related Studies. The Methodology is given in chapter III which contains the Description of the Tools, Population, Sample selection and the Statistical techniques used in this study. Chapter IV contains the Analysis and Interpretation of the data with the Summary of Important Findings and the discussion of the Result. Suggestions for the further work and Conclusion are given in Chapter V. Bibliography follows Chapter V and the Appendix containing copies of the tools follows the Bibliography.

Chapter II

Review of Related Literature

CHAPTER – II

REVIEW OF RELATED LITERATURE

INTRODUCTION

A study of review of literature is very important step, not only in finding a problem but also in the formation of hypothesis and in the selection of methods and tools to be employed in the interpretation of results. A familiarity with the literature in any problem area helps the student to discover what is already known, what others have attempted to find out and what problems remain to be solved. Moreover, a brief analysis of related literature is also helpful for the investigator in giving future suggestion by avoiding duplication. So the study related literature plays a vital role in the field of research in education.

The importance of reviewing studies made earlier in one's field of investigation need not be overemphasized. A literature review is an account of what has been published on a topic by accredited scholars and researchers. Occasionally you will be asked to write one as a separate assignment (sometimes in the form of annotated bibliography), but more often it is a part of the introduction to an essay, research report, or thesis. In writing the literature review, your purpose is to convey to your reader what knowledge and ideas have been established on a topic, what their strengths and weaknesses are. As a piece of writing, the literature review must be defined by a guiding concept.

A literature review shows your readers that you have an in-depth grasp of your subject; and that you understand where your own research fits into and adds to an existing body of agreed knowledge.

Barati, N., Dariush, B., Dastyar, F., & Barati, M., (2020). Human beings have most often had thoughtful and rational interactions with their living environment throughout the history of life. But, nowadays, the continuous observations in the world in different forms reflect the idea that people do not have a favorable relationship with the nature and their living environment. Hence it can be stated that they have become indifferent, negligent, and easygoing towards their life environment and the nature in their periphery. But generally the apathy towards the environment and the necessities of its protection can have a common reason and root, the same way that the human beings' attention and protection of the nature come from the same root. So the point of this study is that despite the vast and profound environmental knowledge attained from scientific findings, where does the indifference towards complications created by neglecting the environment that effect the environment, humanity, and the future come from and what could be the reason? The present researchers of this study believe that the prior research in regard to this issue that have been raised in scientific circles so far to explain and justify this negligence for the environment cannot respond to this important and complex problem. Thus, the current research paper aims at exploring the various aspects of such a problem, thereby to figure out the primary reason for such an indifference and gap. The research method in this article is based on the qualitative method paradigm and can be enumerated amongst analytical-heuristic research. In this method while investigating the cognitive dimensions of the subject and beyond analyzing the scientific sources and existent evidence, the main cause of this phenomenon is discovered and judged by taking advantage of scientific experiences. In the conclusion section, the authors come to the belief that the reduction or omission of the sufficient and necessary attention towards the environment can be defined and elucidated within the format of a hypothesis related to Environmental Intelligence.

Wirdianti, N., Komala, R., & Miarsyah, M. (2019). Notwithstanding that many efforts to overcome environmental problems have been carried out by several parties, yet the issues still occur. Improving students' responsible environmental behavior (REB) can be an alternative to solve environmental problems. This study aimed to analyze the relation between the both variables (i.e. naturalist intelligence and personality) and students' REB at SJHS 51 of Bandung. The research was carried out using quantitative descriptive method through a correlational approach. Naturalist intelligence, personality, and REB data were collected using questionnaires. The research data were analyzed using multiple linear regression at $\alpha = 0.05$. The research results showed that there was a relation between: (1) naturalist intelligence and REB; (2) Personality and REB; and (3) the both predictor variables and REB. Therefore, empowering the both competencies (naturalist intelligence and personality) is the essential step to improve students' REB.

Suhirman, S., Yusuf, Y., (2019). Environmental conservation understanding is one of the crucial factors which determine student attitudes and behavior towards the environment. This study aimed to investigate the effects of problem-based learning and naturalist intelligence on the students' understanding of environmental conservation. This experimental research was conducted at Madrasah Aliyah Negeri (MAN) 1 Praya which employed factorial design. The first factor was the levels of naturalist intelligence (high and low) and the second factor was learning forms (problem-based and expository learning). Two groups were randomly selected from X-MIPA graders of MAN 1 Praya**.** The data were collected through tests which then were analyzed using ANOVA at 0.05 significance level. The results of the study indicated that problem-based learning affected the students' understanding of environmental conservation, while naturalist intelligence did not affect it. Furthermore, there were no interactions between these two factors.

Sigit, D., Azrai, E., Heryanti, E., Anggraeni, K., Ichsan, I., & Fadrikal, R. (2019). Damage to coral reefs and mangroves results in disturbed ecosystem balance. This needs to be anticipated, one of which is through learning this research developed environmental conservation model through Environmental Education Community Network (EECN) and aimed to know the knowledge and attitude on the conservation of mangrove and coral reefs on students through EECN. This research was experimental research involving 40 high school students in the Jakarta area. Students got lectures on mangroves and coral reefs as well as observation and direct planting of mangroves and coral reefs in Tidung Island, Thousand Islands (Kepulauan Seribu, Indonesia). Knowledge data and attitudes were obtained before and after treatment. The results showed that there were significant differences to the knowledge and attitude on the conservation of mangrove and coral reefs before and after treatment. This implies that direct field recognition supplied benefits and changes in knowledge and attitudes on conservation.

Amran, A., Perkasa, M., Satriawan, M., Jasin, I., & Irwansyah, M. (2019). The study aims to measure students 21st century attitudes and environmental awareness. This study is a survey study which is part of development research of character learning model based on education for sustainable development. The data were collected by using 21st century attitude questionnaire and environmental awareness self-assessment that given to senior high school students in West Nusa Tenggara (NTB). The instrument was adapted from Assessment and Teaching of 21st Century Skills (ATC21S) that consists of four aspects are critical thinking, collaboration, communication and creative thinking. The result shows that generally students 21st century attitude can be categorized on low category and mostly students environmental awareness can be concluded on enough category. The study will be used as the reference and need assessment of developing character learning model based on education for sustainable development.

Dian, R., & Komala, R. (2019). Efforts to improve environmental responsibility are still being developed partially, in fact this is the result of the interaction of various factors. This study aimed to investigate the effect of personality and intention to act of the responsible environmental behavior. This research was conducted at Senior High School Insan Cendekia Madani Boarding School in the second semester of 2017-2018 academic year. The method used were survey with quantitative-causal approach. This study used three variables i.e. personality (exogenous variable/X1), intention to act (exogenous variable/X2), and responsible environmental behavior (endogenous variable/X3). The subject were 90 students from grade XI of mathematics and science. The data analysis technique was used path analysis. Based on hypothesis test conducted, the values of the path coefficient between X1 and X2 was 0.385, X2 and X3 was 0.209, X1 and X3 through X2 was 0.08. The results showed that there was significant indirect effect of personality to responsible environmental behavior through the intention to act of Senior High School students.

Beckett, C., & Keeling, A. (2019). To date, research on mine remediation in North America has focused primarily on technical management; relatively less is known about the historical, political and social dimensions of remediation. Remediation, as a continuation of the mining process, alters local landscapes and economies and can be both dangerous and beneficial for surrounding communities. Because remediation projects tend to focus on the technical aspects of clean-up, such projects risk overlooking the environmental injustices associated with past development and obscuring blame or responsibility from industry and government for environmental degradation. Insofar as it is understood as cleaning up or repairing environmental damage, remediation is generally seen as “doing the good” and is less amenable to political or ethical challenges based on community concerns or values. This paper argues that greater attention needs to be paid to public participation and justice concerns associated with cleaning up mine sites. Drawing from the literatures on ecological restoration, environmental justice, reconciliation, discard studies, and matters of care, we highlight critical, yet overlooked issues in the remediation of post-mining landscapes. We argue that remediation projects present a unique opportunity for the negotiation and articulation of morals, values, histories, and physical experiences associated with mine sites and we seek to re-frame remediation as an ongoing, creative process of community healing.

Putra,A., Rahmat,A., Redjeki,S., & Hidayat,T., (2018). This study aims to determine the ability of the ecological intelligence of pre-service biology teacher in the course of environmental knowledge. This research includes qualitative research type with qualitative descriptive approach. The variables analyzed are the students' ecological intelligence ability, especially on the subject of environmental knowledge with the materials such as Environmental Characteristics, Ecological Concepts, Material and Energy, Human and Environment, Natural Resources and Environment, Health and Environment.. The results showed that the ability of ecological intelligence of pre-service biology teacher in the subject of environmental knowledge was good enough. For the content aspect, the highest score is on ecological concepts, as well as human and environmental, by 85%. In the skill aspect, the highest score is on material and energy concepts that is 85%. While in the attitude aspect, the highest score is on the material of ecological concepts 86%.

Retnowati1,R., Suharyati1,H., Manurung,R.T., Maknun,D., Armariena,D,N., Hetilaniar, Hasanudin,C., Murniviyanti,M., Anwar,S., and setyorini,R., (2018). The research objectives are to find the effect of environmental teaching method and natural intelligence on environmental view of the student's behavior. The sample of the research is the fourth year students of public elementary school Bangka IV, Bogor with as many as 52 students taken as the cluster randomized sampling. The research applies 2x2 factorial design. The research results reveal that (1) Environmental view of the student's behavior between the students taught through discussion starter story and those taught through fieldtrip strategy is not significantly different. (2) The students with high natural intelligence and the students who are taught through discussion starter story have similarly good results to the students who are taught trough fieldtrip strategy in relation to environmental view of the student's behavior. (3) The discussion starter story has more significant effect on the students with low natural intelligence compared to fieldtrip strategy in building environmental view of the student's behavior. (4) There is an interaction effect between the teaching method and natural intelligence in relation to environmental view of the student's behavior. Therefore, there is an effect of environmental teaching method and natural intelligence on the environmental view of the student's behavior.

Mainaki,R., Kastolani,W., Setiawan,I., (2018). Indonesia is experiencing serious environmental problems as a negative impact of development. One of the areas that shows the problem of the environment is Cimahi City located in West Java Province. Therefore, efforts are needed to prepare future generations in order to have high ecological intelligence. The intelligence can be prepared and established through the process of education in the School. The purpose of this study is to measure the level of ecological intelligence of high school students in Cimahi City. This research uses survey method based on quantitative approach. The technique of determining the number of samples using stratified ramdom sampling and obtained 35 schools as sample. Data collection techniques used observation, interviews, questionnaires, literature studies and documentation studies. Data then analyzed and presented with descriptive statistic technique. The results showed that the level of ecological intelligence of learners varied between schools, from moderate to high levels. Judging from the components of ecological intelligence, the attitude aspect has the highest score followed by aspects of knowledge, skills and participation. All parties need to encourage schools and learners to improve ecological intelligence through various programs at schools based on environmental conservation efforts.

Ningrum, Z. B., Edhi, T., Soesilo, B., & Herdiansyah, H. (2018). Students in universities being an important part of responses to reduce environmental problems and bear profound responsibilities to increase the awareness to create on environmentally sustainable future. The study focuses on the naturalistic intelligences from one of Multiple Intelligences Theory by Howard Gardner. This study aimed to analyze the relationship between naturalistic intelligence with environmental awareness on graduate students at University of Indonesia. In this study, naturalistic intelligence is the independent variable while environmental awareness is the dependent variable. The students who were selected randomly will be given a questionnaire as a research instrument. Afterward, a correlation analysis was conducted with Spearmann test. This study shows that environmental science students had high naturalistic intelligence and good environmental awareness. The analysis shows that there is a strength and significant correlation between the naturalistic intelligence with environmental awareness among graduate students with the value of coefision correlation is 0,754. The students who interest in flora and fauna, understanding the environmental problems, enjoy outdoor activities, have scientific hobbies and concern to the change of environmental will also have a high awareness of the environment. The naturalistic intelligence of the students possess also develops a positive attitude toward the environment and directs the students to have a pro-environmental behavior.

Aguado, E., & Holl, A., (2018). The purpose of this paper is to analyze the factors that are related to Small and Medium Enterprises' (SMEs') environmental attitude. We focus on Spain and Norway—two contrasting countries in this regard. Drawing on evidence from the Flash Eurobarometer 381 Survey: SMEs, Resource Efficiency and Green Markets, the results show that there is a significant difference on environmental commitment in favor of Norway. Our estimation results show that firms' structural characteristics are strong factors influencing attitudes towards environmental responsibility, but even after controlling for such firm-specific differences, Norwegian firms still show a higher probability for a pro-environmental attitude. Moreover, our estimation results also show that the drivers for firms to go beyond environmental legislation are not the same in the two countries. Norwegian firms are more market-driven than Spanish firms in their pro-environmental attitude.

Sadhu, S. D., Garg, M., & Kumar, A. (2018). Human activities in past decades have raised serious issues related to the environment and its conservation. Air pollution, poor management of waste, growing water scarcity, falling groundwater tables, water pollution, preservation and quality of forests, biodiversity loss, and land/soil degradation, global climate change, pollution, environmental degradation, resource depletion, and genetically modified foods are the current environmental problems that make us vulnerable to disasters and tragedies, now and in the future. For environmental issues including pollution of air and water, pollution related to heavy metals, and contamination of food, nanomaterial may be used as a promising and effective tool to overcome major challenges in the development of remediation methods that help in the protection of the environment. In this chapter, the essential aspects of environmental problems will be reviewed and then the application of new nanomaterials, which can serve as environmental cleaners, will be discussed.

Sreeja,P.,& Nalinilatha,M., (2017). The study aimed to identify the relationship between social intelligence and academic achievement of higher secondary students. The investigator adopted survey method to study the social intelligence between students from selected government, private and aided school. For this study a sample of 300 school students from eight various schools which are situated in Palakkad district selected by the investigator using simple random sampling technique. The findings revealed that there is no significant relationship between social intelligence and academic achievement. This study shows that students do not find healthy environment in schools for developing their social intelligence. The schools fail to provide a proper environment to develop better relationship, positive behavior, social skills positive attitudes and good mental health in students.

Karolina W. Cynk (2017). The aim of this article was to characterise and compare the level of environmental intelligence among university students from selected countries of Central and Eastern Europe. This was done using empirical data collected by the author in 2015. In the introduction and theoretical part of this text, the term ‘environmental intelligence’ is defined, and issues raised by modern sociologists such as M. Maffesoli and M. Archer are presented. Two hypotheses stating that respondents from Poland, Slovakia and Czech Republic have higher levels of environmental intelligence than university students from the Ukraine, and those studying natural sciences have higher levels of environmental intelligence than students of the humanities or social sciences were verified. The statistical analysis conducted in the second part of the text revealed a higher level of environmental intelligence among students from the European Union countries compared to respondents from the Ukraine. However, there were no significant differences between the level of environmental intelligence and respondents' faculty of studies. This indicates that studying natural sciences did not contribute to a more dynamic development of environmental intelligence in students. This revelation may be disturbing, as the state of the environment cannot improve if young people cannot use and care for it responsibly.

Mapotse, T. A., & Mashiloane, T. K. (2017). The availability and accessibility of disposable items has contributed immensely to our littering behaviour as humans. People discard plastic containers, paper wrappers and other items by throwing them onto the ground, thus aggravating the problem of littering. This study aims to assist the relevant stakeholders in integrating environmental awareness activities into the school curriculum, to drastically reduce littering in communities. Underpinned by developmental action theory and applied participatory paradigms, the study purports to assess the success of environmental action research campaigns aimed at combatting littering. Fourteen learners from seven classes served as co-researchers, having been randomly selected as participants in this study. Participants' observations and pictures were used to collect data, before resorting to coding and analysis. The results of the study show an improvement in learners' awareness of littering, allowing the authors to conclude that action research, if employed in environmental education, can raise learners' awareness pertaining to littering. A lack of environmental programmes in schools is also to blame for the fact that children often unwittingly litter or pollute their environment.

Liljedahl, B., & Waleij, A., (2014), This paper provides an elaboration of the usefulness and potential for environmental intelligence including to support impact assessments in developing regions. In particular it discusses one product, the environmental vulnerability assessment (EVA) and the framing of the EVA within the Swedish Armed Forces Medical Intelligence. The methodology of the EVA is described as well as some techniques used to facilitate the analysis. From practical experiences drawn by developing and using the EVA, it is concluded that the EVA already consists of information useful for civilian actors, law enforcement and corporate organizations. It could furthermore easily be modified even further facilitate accurate impact assessments in crises and post conflict contexts.

Gleick., & Peter,H., (2014). The devastating civil war that began in Syria in March 2011 is the result of complex interrelated factors. The focus of the conflict is regime change, but the triggers include a broad set of religious and sociopolitical factors, the erosion of the economic health of the country, a wave of political reform sweeping over the Middle East and North Africa (MENA) and Levant region, and challenges associated with climate variability and change and the availability and use of freshwater. As described here, water and climatic conditions have played a direct role in the deterioration of Syria's economic conditions. There is a long history of conflicts over water in these regions because of the natural water scarcity, the early development of irrigated agriculture, and complex religious and ethnic diversity. In recent years, there has been an increase in incidences of water-related violence around the world at the subnational level attributable to the role that water plays in development disputes and economic activities. Because conflicts are rarely, if ever, attributable to single causes, conflict analysis and concomitant efforts at reducing the risks of conflict must consider a multitude of complex relationships and contributing factors. This paper assesses the complicated connections between water and conflict in Syria, looks more broadly at future climate-related risks for water systems, and offers some water management strategies for reducing those risks.

Gifford, R., & Nilsson, A. (2014). We review the personal and social influences on pro-environmental concern and behaviour, with an emphasis on recent research. The number of these influences suggests that understanding pro-environmental concern and behaviour is far more complex than previously thought. The influences are grouped into 18 personal and social factors. The personal factors include childhood experience, knowledge and education, personality and self-construal, sense of control, values, political and world views, goals, felt responsibility, cognitive biases, place attachment, age, gender and chosen activities. The social factors include religion, urban–rural differences, norms, social class, proximity to problematic environmental sites and cultural and ethnic variations We also recognize that pro-environmental behaviour often is undertaken based on none of the above influences, but because individuals have non-environmental goals such as to save money or to improve their health. Finally, environmental outcomes that are a result of these influences undoubtedly are determined by combinations of the 18 categories. Therefore, a primary goal of researchers now should be to learn more about how these many influences moderate and mediate one another to determine pro-environmental behaviour.

Trivedi, B., & Unhelkar, B., (2013), Green IT can be defined as the conscious implementation of technologies, techniques and policies designed to reduce the carbon footprint of the IT function within the organization and the use of IT to reduce the carbon footprint of the whole organization. By adopting Green IT practices, business enterprises can contribute positively to environmental stewardship and protect the environment while reducing the energy costs. The holistic approach to environmental sustainability making the best use of IT resources available to the organization is termed as environmental intelligence (EI) in this paper. This paper explores creative ways of looking at the environmental challenge, opens up opportunities to examine processes for collaboration, take stock of the inventory and infrastructure for optimization, and explore the possibilities of new business streams. This research paper aims to find out the impact of technologies such as server virtualization, cloud computing, anytime anywhere technologies and right network (as a specialist domain of Green ICT) on EI of different business organizations of Vadodara. This study employed the ordinal logistic regression to understand the impact of green ICT on the manufacturing business.

Gifford, R. (2012). Environmental psychology is the science and practice that investigates the mutual relations between people and their physical environments at the individual and small-group level. It examines fundamental processes such as perception of landscapes and buildings, cognitions about the environment and **spatial cognition**, and personality; social processes such as personal space, crowding, and the effects of high density, territoriality, and privacy; and the analysis of human transactions with the built and natural environment, including architecture and sustainability. Wherever people are, at home, in schools, at work, in parks, or on the street, they and the environment are constantly interacting in positive and in negative ways. These interactions occur not only in attitudes and emotions but also in actions and well-being.

Clavero, M., Villero, D., & Brotons, L. (2011). Different components of global change can have interacting effects on biodiversity and this may influence our ability to detect the specific consequences of climate change through biodiversity indicators. Here, we analyze whether climate change indicators can be affected by land use dynamics that are not directly determined by climate change. To this aim, we analyzed three community-level indicators of climate change impacts that are based on the optimal thermal environment and average latitude of the distribution of bird species present at local communities. We used multiple regression models to relate the variation in climate change indicators to: i) environmental temperature; and ii) three landscape gradients reflecting important current land use change processes (land abandonment, fire impacts and urbanization), all of them having forest areas at their positive extremes. We found that, with few exceptions, landscape gradients determined the figures of climate change indicators as strongly as temperature. Bird communities in forest habitats had colder-dwelling bird species with more northern distributions than farmland, burnt or urban areas. Our results show that land use changes can reverse, hide or exacerbate our perception of climate change impacts when measured through community-level climate change indicators. We stress the need of an explicit incorporation of the interactions between climate change and land use dynamics to understand what are current climate change indicators indicating and be able to isolate real climate change impacts.

Byrka, K., Hartig, T., & Kaiser, F. G.,(2010). Environmental attitude and ecological behavior were investigated in relation to the use of nature for psychological restoration. Specifically, with survey data from 468 German university students, the role of environmental attitude was investigated as a mediator of the restoration-behavior relationship. Assuming that positive experiences in nature can have a broad influence on environmental attitudes, the New Ecological Paradigm (NEP) scale, an attitudinal measure with broad scope, was adopted. Hierarchical regression analyses indicated partial mediation by environmental concern. The study helps to consolidate the restoration theme in the growing literature on positive motivations for ecological behavior.

Lahsen, M., Sanchez-Rodriguez, R., Lankao, P. R., Dube, P., Leemans, R., Gaffney, O., Smith, M. S. (2010). The socio-economic impacts of environmental stresses associated with global environmental change depend to a large extent on how societies organize themselves. Research on climate-related societal impacts, vulnerability and adaptation is currently underdeveloped, prompting international global environmental change research institutions to hold a series of meetings in 2009–2010. One of these aimed at identifying needs in middle-income and low-income countries (MLICs), and found that effective responses to the challenge of reducing vulnerability and enhancing adaptation will drive research and policy into challenging and innovative areas of research. Producing impacts, vulnerability and adaptation knowledge requires greater inclusion of MLIC researchers and a rethinking of the research structures, institutions and paradigms that have dominated global change research to date. Scientific literature discussed in this article suggests that governance issues need to become central objects of empirically based, detailed, multi-scalar and action-oriented research, and that this needs to address the politically sensitive and seemingly intractable issue of reducing global inequities in power and resource distribution. The scientific literature suggests that without effective action in those directions, current trends toward greater inequality will continue to both reflect and intensify global environmental threats and their impacts.

Rechkemmer, A., & Falkenhayn, L. von. (2009). Global environmental change affects all societies and their environments at various spatial and temporal scales. The linking of natural ecosystems to social ones is of central importance for the analysis, mitigation of and adaptation to any action or issue related to sustainability and global change. When examining the human dimensions of environmental change, the study of ecosystem services illustrates the strong interlinkages existing between both socio-ecological systems and global change. Ecosystem services are inextricably linked to human well-being and play a central role in sustainable adaptation strategies. Environmental impact of global change can both add to social vulnerability and change resilience by altering the supply of ecosystem services and the trade-offs which can occur. It is when examining such phenomena that the importance and abilities of governance systems to shape change and responses are seen.

Marston, R. A. (2008). One of the greatest challenges facing mountain scholars is to separate environmental change caused by human activities from change that would have occurred without human interference. Linking cause and effect is especially difficult in mountain regions where physical processes can operate at ferocious rates and ecosystems are sensitive to rapid degradation by climate change and resource development. In addition, highland inhabitants are more vulnerable to natural hazards and political-economic marginalization than populations elsewhere. This address focuses on the Nanga Parbat massif in the Himalaya Range of Pakistan, Garhwal Himalaya of northwest India, and Manaslu-Ganesh Himals of central Nepal. I have highlighted three special insights that geographers offer to increase understanding of human impacts on the stability of mountain landscapes. First, the mixed methods and theories we employ—quantitative and qualitative, postpositivist science and social theory, muddy-boots fieldwork linked with GIScience—together position geographers to resolve the debate over human-triggered changes in the physical landscape in mountains and explain the frequent disconnect between mountain science, policymaking, and resource management. Second, academic scholars and policymakers have come to realize that most problems require training, experience, and expertise in understanding physical and human systems. Third, modern techniques of measuring rates of geomorphic change help place the human factor in perspective and explain spatial variability of natural hazards. Forecasting environmental change remains elusive in “the perfect landscape” of mountains.

Stipanicev,D., Bodrozi,Lj., & Stula,M., (2007). By appropriate integration of advanced ICT systems in an environment, in a way that those highly technological systems become almost its integral part, it is possible to provide additional environment features. Those features are primarily self-monitoring and self-protection, giving the environment rudimentary intelligence and possibility, to operate not only by reaction, but also to operate proactively, having in "mind" its self-protection. In such a way the environment becomes the intelligent environment or more accurately the intelligent self-monitoring, self-protecting and self-aware environment that reacts on changes and in real time alarms humans responsible for appropriate environment protection actions which will prevent environment further degradation. The paper describes overall architecture of such intelligent environment based on advanced sensor network called the observer network. As an example the system architecture of the forest fire monitoring system is discussed.

Kaiser, F. G., & Shimoda, T. A. (1999). How responsible a person feels for the environment is a promising predictor of that person's ecological behaviour. One difficulty of using responsibility feelings as a predictor is that people can feel either morally or conventionally responsible. Moral responsibility feelings depend on a person's self-ascribed responsibility (i.e. a deliberate responsibility judgement) and guilt feelings. Conventional responsibility feelings depend on the social expectations a person is aware of and his or her readiness to fulfill these expectations. In a survey study of 445 members of two Swiss transportation associations, the relative influence of these distinguishable responsibility concepts on ecological behaviour was assessed.

Structural equation analyses revealed that people apparently feel morally responsible rather than conventionally responsible for the environment. Guilt feelings explain 44 per cent of the variance of these responsibility feelings, which, in turn, explain 45 per cent of the variance of a person's deliberately made responsibility judgement, which, in turn, predicts 55 per cent of the variance of a person's ecological behaviour. These results suggest that if people feel guilty for what they do or fail to do, they also feel morally responsible for the environment. This promotes their self-ascription of responsibility and it is this judgement that predicts a considerable portion of a person's ecological behaviour.

Kraselsky, B.D., GravattJr, C.C. (1989). Satellite remote sensing is being used to obtain a wide range of information about the land, the oceans, the atmosphere and man-made objects. This information, or “environmental intelligence”, is used to help solve problems that affect the general population, such as the greenhouse effect, the depletion of the ozone layer and land use planning, as well as for specialized commercial activities such as agriculture and forestry evaluations, mineral and petroleum exploration.

The level of commercial involvement in the use of satellite remote-sensing data is increasing, due to technological and economic factors. However, commercial involvement in satellite system operations is plagued with economic impediments, is running into conflict with international obligations that regard this activity as a public good, and is being chilled by ambiguous domestic laws and regulations. The purpose of this paper is to identify the trends in commercial development; the legal, political, technical and economic factors that will affect the rate of this development; and the impact that such development will have on the overall conduct of satellite remote sensing activity.

CONCLUSION

The review of research studies related Environmental Intelligence of higher secondary school students, teachers, adolescent, adult and children from India and abroad shows important role of Environmental Intelligence. Till there exists a gap in factors related to Environmental Intelligence.

Chapter III

Methodology

CHAPTER -III

METHODOLOGY

3.1 INTRODUCTION

Methodology is an important aspect in any kind of research work. The role of methodology is to carry on research work in scientific and valid manner. Methodology is a process, which reveals all those methods and techniques used by the researcher during the course of studying her research problem. Adaptations of a suitable methodology raise the efficiency and dignity of the research work. The success of any research mainly depends on the tools, techniques and proper methods adopted in the research process.

3.2 DESIGN OF THE STUDY

A research design is highly essential and it is inevitable as a blueprint. In the present investigation Descriptive research design and survey analysis is followed.

3.3 LOCATION OF THE STUDY

The present investigation was conducted in the schools among Higher Secondary School students in Cuddalore District.

3.4 RESEARCH METHOD

Descriptive research method is used in the present study. It seeks to obtain precise information concerning the current status of phenomena and to draw valid general conclusions from the facts discovered. This study is not restricted only to fact findings but in formulation of important principal knowledge and solution of significant problem related to Hr. sec school teacher and other significant variables related to it.

3.5 SAMPLE OF THE STUDY

Students from self - financing, aided and government schools were chosen for sample collection. The respondents were randomly selected from each school.

3.6 DISTRIBUTION OF THE SAMPLE

The random sampling method was used to select the samples. The samples was divided into different categories on the basis of the school type, age, gender, locality, medium, mother qualification, father qualification, parents' occupation, parents, income, number of family members and family type.

Table – 3.1

LIST OF SCHOOLS INVOLVED IN THE STUDY

S.NO	SCHOOL NAME	PLACE	NO. OF RESPONDENTS
1.	Government Girls Higher Secondary School	Vadalur	59
2.	Vallalar Gurukulam Higher Secondary School	Vadalur	46
3.	R R Matriculation Higher Secondary School	Nellikuppam	49

SAMPLE SIZE

Nearly 50,000 Higher Secondary Students are Studying in Cuddalore District. So the population of the study is 50,000. The researcher planned to collect 0.5% of students as sample from the population.

VARIABLES SELECTED FOR THE STUDY

For the present investigation the investigator selected the following variables.

Research Variables

1. Environmental Intelligence

Demographic variables

1. Type of the school
2. Age
3. Gender
4. Locality
5. Medium
6. Mother qualification
7. Father qualification
8. Parent’s occupation
9. Parent’s income
10. No. of family members
11. Family type

Table 3.2

THE DETAILED DISTRIBUTION OF THE SAMPLES

S.No	Variables		N	Percentage
1.	Type of School	Self - financing	49	31.8
		Govt.	59	38.3
		Aided	46	29.9
2.	Age	Below 10	0	0
		10 – 20	154	100
		Above 20	0	0
3.	Gender	Female	115	74.7
		male	39	25.3
4.	Locality	Urban	53	34.4
		Rural	101	65.6
5.	Medium	English	71	46.1
		Tamil	83	53.9
6.	Mother Qualification	School Education	136	88.3
		Diploma	4	2.6
		College Education	14	9.1
7.	Father Qualification	School Education	119	77.3
		Diploma	15	9.7
		College Education	20	13.0
8.	Parent Occupation	Cooli	100	64.9
		Self-employment	41	26.6
		business	8	5.2
		Government	5	3.2
9.	Parent Income	50,000 – 75,000	101	65.6
		75,000 – 1,00,000	35	22.7
		1,00,000 – 1,25,000	15	9.7
		1,25,000 – 1,50,000	3	1.9
10.	No of family members	3 & below	9	5.8
		4	65	42.2
		5	50	32.5
		6 & Above	30	19.5
11.	Family Type	Join Family	46	29.9
		Nuclear Family	83	53.9
		Single Parent family	25	16.2

TOOL USED

Environmental Intelligence Assessment Scale constructed and validated by Dr.D.Ponmozhi and K.S.Afrin Begum (2020) has been used in this study.

DESCRIPTION OF THE TOOL USED

Environmental Intelligence Assessment Scale constructed and validated by Dr.D.Ponmozhi and K.S.Afrin Begum (2020). This scale consists of 26 statements covering the 4 dimensions of environmental intelligence. Each statement has the range of five responses. They are Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree. The respondents are requested to put a tick in the relevant column against each statement.

PILOT STUDY

This scale with 26 statements has been administered to the sample of 50 higher secondary school students studying in different schools in Cuddalore district, in order to carry out the pilot study. Then their responses have been scored carefully and they were subjected to item analysis. A copy of Environmental Intelligence scale is given in Appendix-I.

SCORING

In the Environmental Intelligence Scale used, each statement is followed by five alternatives viz., ‘strongly agree (SA)’, ‘Agree (A)’, ‘Neutral (N)’, ‘Disagree (DA)’, ‘Strongly Disagree (SD)’. In case of favorable statements, the scores given to different responses are as follows; Positive Statement SA-5, A-4, N-3, D-2, SD-1. Negative Statement SA-1, A-2, N-3, D-4, SD-5.

DIMENSIONS OF ENVIRONMENTAL INTELLIGENCE

Recycling: Individual's awareness about sustainability and the importance of green living.

Pollution: Individual's knowledge about pollution, its causes, effects and preventive measures to reduce and avoid pollution.

Natural Resources: Individual's knowledge about extinction of natural resources due to overexploitation, deforestation, and the importance to conserve nature, ways to conserve natural resources

Daily Habits: Individual's habits to save water, energy resources, readiness to face disaster, and usage of eco-friendly products in their day-to-day life.

Table-3.3

DIMENSIONS OF ENVIRONMENTAL INTELLIGENCE AND THEIR ITEMS USED IN PILOT STUDY

S.NO	DIMENSIONS	NO OF ITEMS
1.	Recycling	7
2.	Pollution	5
3.	Natural Resources	5
4.	Daily Habits	9
Total		**26**

ITEMS ANALYSIS AND SELECTION OF ITEMS

The scale has the 'Universe of content as it includes statements from all the selected dimensions of Recycling, Pollution, Natural Resources and Daily Habits. Due weightage was given to all the dimensions while selecting items. The scale contains 26 statements which represent the universe of content. Hence, it has content validity. It has also construct validity as items were selected having the 't' values equal to or more than 1.75. (Edwards, 1975). The scale was given to experts in the field of education and they agreed that the items in the scale were relevant to the objectives of the study. Hence it has face validity also. The present study employed Chronph Alpha method to determine the co-efficient of internal consistency. The reliability of the Chronph Alpha test is found to be 0.91.

Table - 3.4

ITEM ANALYSIS AND SELECTION ITEM FOR ENVIRONMENTAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENT QUESTIONNAIRE SCALE

Item No	t-Value	Result
1	-3.65	S
2	-2.71	S
3	-7.5	S
4	-4.79	S
5	-2.90	S
6	-14.32	S
7	-10.88	S
8	-3.72	S
9	-2.89	S
10	-1.29	NS

11	-2.30	S
12	-9.21	S
13	-2.17	S
14	-8.47	S
15	-0.59	NS
16	-4.50	S
17	0.09	NS
18	-9.92	S
19	-6.23	S
20	-7.39	S
21	-1.28	NS
22	-5.86	S
23	-3.26	S
24	-7.75	S
25	-4.50	S
26	-5.30	S

FINAL STUDY

This scale with 22 statements has been administered to the sample of 154 higher secondary school students studying in different schools, in order to carry out the final study. Then their responses have been scored carefully and they were subjected to item analysis. A copy of Environmental Intelligence scale final is given in Appendix-II.

Table-3.5

DIMENSIONS OF ENVIRONMENTAL INTELLIGENCE AND THEIR ITEMS USED IN FINAL STUDY

S.NO	DIMENSIONS	NO OF ITEMS
1.	Recycling	7
2.	Pollution	4
3.	Natural Resources	3
4.	Daily Habits	8
Total		**22**

VALIDITY AND RELIABILTY OF THE TOOL

The reliability scale was found with help of chronph alpha and the reliability scale was 0.91 and validity of the scale is 0.95

STATISTICAL TECHNIQUES USED

The following Random sample techniques were used for analysis and interpretation of data.

Descriptive analysis:

1. Measure of central tendency [Mean]
2. Measure of variability [Standard Deviation]

Inferential Analysis:

1. “t” test
2. “f” test

Multiple Correlation and Regression Analysis

LIMITATION OF THE STUDY

1. There are many methods for measuring the environmental intelligence of higher secondary school students. Simple questionnaire method is used.
2. 154 respondents were considered for the research work.
3. The sample was collected from higher secondary school students.
4. The samples were collected from Cuddalore district.
5. Samples are taken from government, aided and self-financing schools.
6. Data collected both in Tamil and English medium.

CONCLUSION

To find out the Environmental Intelligence of higher secondary students, Environmental Intelligence scale (constructed and validated by the Researcher K.S.Afrin Begum and Guide Dr.D.Ponmozhi 2020) was administered to a sample of 154 students. The score was subjected to statistical treatments, which are described in the succeeding chapter IV.

Chapter IV

Analysis and Interpretation

CHAPTER-IV

ANALYSIS INTERPRETATION

4.0 INTRODUCTION:

The statistical analysis of the data has been presented in this chapter. The data collected from 154 Higher Secondary School Students in Cuddalore District (Tamil Nadu) have been analyzed as follows to arrive at meaningful conclusions.

- Descriptive Analysis (Mean and Standard Deviation)
- Inferential Analysis(t-test and f-test)
- Multiple correlation Analysis

4.1 LEVEL OF SIGNIFICANCE:

The level of significance for rejection or acceptance of the hypothesis has to be decided in advance. In reporting the findings of the study, the researcher should indicate the actual probability level associated with the findings so that the researcher may use her own judgments in deciding whether the null hypothesis should be rejected or accepted in the present study 0.05 Level of significant has been taken into account.

4.2 DESCRIPTIVE ANALYSIS:

One of the important objectives of present study is to find the Environmental intelligence of Higher Secondary School Students. For that, the investigator used the Environmental Intelligence Scale constructed and validated by the guide Dr. D. Ponmozhi and researcher

K. S. Afrin Begum(2020). The test consists of 22 items. The maximum score for this test is 110. For that Higher Secondary School Students were divided into very low, low, moderate, high and very high in level of Environmental Intelligence. In order to divide sample into above stated categories investigator adopted the following method. The categorization was done by dividing the base line normal curve into 5 units, each unit being with the levels very low (0-22), low (23-44), moderate (45-66), high (67-88) and very high (89-110).

ANALYSIS OF THE LEVEL OF ENVIRONMENTAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS

Table 4.1

Percentage analysis of Environmental Intelligence of higher secondary school students

Score of the total sample

S.No	Environmental intelligence	Score	Percentage
1	Very low	0	0
2	Low	1	1
3	Moderate	15	10
4	High	76	49
5	Very High	62	40

From the above table 4.1 it is clear that 40 percent of higher secondary students have very high level of Environmental Intelligence, 49 percent of higher secondary school students have high level of Environmental Intelligence, 10 percent of higher secondary school students have high level of Environmental Intelligence and 1 percent of higher secondary school students have high level of Environmental Intelligence.

ANALYSIS OF THE LEVEL OF ENVIRONMENTAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS OF ENTIRE AND SUB-SAMPLES:

One of the important objectives of the study is to assess the level of Environmental Intelligence of Higher Secondary School Students not only for the entire sample but also subsamples wise. For that the mean, standard deviation values have been calculated for entire and subsamples which include school type, age, gender, locality, medium, mother qualification, father qualification, parents' occupation, parents' income, number of family members and family type.

Table 4.2

Mean and Standard Deviation of Environmental Intelligence of higher secondary school students for total Sample

Variable	Mean	N	Standard Deviation
Environmental Intelligence	84.69	154	13.57

The above table 4.2 shows the mean score and standard deviation of Environmental Intelligence of Higher Secondary School Students. It is found to be 84.69 and 13.57 respectively and concluded that **Environmental Intelligence of higher secondary school students is high**.

TABLE 4.3

DESCRIPTIVE ANALYSIS THE TOTAL ENVIRONMENTAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS

S.No	Variables		N	Percentage	Mean	SD
1.	Type of School	Self - financing	49	31.8	93.35	9.70
		Govt.	59	38.3	73.14	10.38
		Aided	46	29.9	90.30	9.89
2.	Gender	Female	115	74.7	83.65	14.26
		male	39	25.3	87.76	10.88
3.	Locality	Urban	53	34.4	91.91	12.38
		Rural	101	65.6	80.91	12.65
4.	Medium	English	71	46.1	87.56	13.33
		Tamil	83	53.9	82.24	13.36
5.	Mother Qualification	School Education	136	88.3	83.30	13.19
		Diploma	4	2.6	103.75	3.20
		College Education	14	9.1	92.79	12.44
6.	Father Qualification	School Education	119	77.3	82.34	13.02
		Diploma	15	9.7	91.53	13.44
		College Education	20	13.0	93.60	11.90
7.	Parent Occupation	Cooli	100	64.9	82.20	13.81
		Self-employment	41	26.6	88.24	12.05
		business	8	5.2	91.50	9.59
		Government	5	3.2	94.60	14.45
8.	Parent Income	50,000 – 75,000	101	65.6	81.71	13.90
		75,000 – 1,00,000	35	22.7	89.03	10.53
		1,00,000 – 1,25,000	15	9.7	91.67	11.56
		1,25,000 – 1,50,000	3	1.9	99.67	10.97
9.	No of family Members	3 & below	9	5.8	86.33	13.25
		4	65	42.2	84.60	13.20
		5	50	32.5	85.02	12.44
		6 & Above	30	19.5	83.87	16.59
10.	Family Type	Join Family	46	29.9	85.50	15.13
		Nuclear Family	83	53.9	82.27	12.93
		Single Parent family	25	16.2	91.28	10.33

The above table 4.3 exhibits the whole details about Environmental Intelligence of Higher Secondary School Students, its mean and standard deviation for the demographic variables such as school type, age, gender, locality, medium, mother qualification, father qualification, parents' occupation, parents' income, number of family members and family type.

It is inferred from the above table that, 32 percent of the respondents are self-finance school students and 38 percent of the respondents are government school students, 30 percent of the respondents are aided school students. The mean and standard deviation for self-financed students are 93.35 and 9.70 respectively. The mean and standard deviation for government students are 73.14 and 10.38 respectively. The mean and standard deviation for aided students are 90.30 and 9.89 respectively. **The self-financing students show high level of Environmental Intelligence than others.**

It is inferred from the above table that, 75 percent of the respondents are Female Students and 25 percent of the respondents are Male Students. The mean and standard deviation for Female Students are 83.65 and 14.26 respectively. The mean and standard deviation for Male Students are 87.77 and 10.88 respectively. **The Male Students show high level of Environmental Intelligence than Female Students.**

It is inferred from the above table that, 34 percent of the respondents are living in urban area and 66 percent of the respondents are living in rural area. The mean and standard deviation for the urban students are 91.91 and 12.38 respectively. The mean and standard deviation for the rural students are 80.91 and 12.65 respectively. **The students living in urban area show high level of Environmental Intelligence than the students living in rural area.**

It is inferred from the above table that, 46 percent of the respondents are studying in English medium and 54 percent of the respondents are studying in Tamil medium. The mean and standard deviation for the English medium students are 87.56 and 13.33 respectively. The mean and standard deviation for the Tamil medium students are 82.24 and 13.36 respectively. **The students studying in English medium show high level of Environmental Intelligence than the students studying in Tamil medium.**

It is inferred from the above table that, 88 percent of the respondents' mothers are qualified in school education, 3 percent of the respondents' mothers are qualified in diploma, 9 percent of the respondents' mothers are qualified in college education. The mean and standard deviation for school education mothers are 83.30 and 13.19 respectively. The mean and standard deviation for diploma mothers are 103.75 and 3.20 respectively. The mean and standard deviation for college education mothers are 92.76 and 12.44 respectively. **The diploma qualified mothers' student show high level of Environmental intelligence than others.**

It is inferred from the above table that, 77 percent of the respondents' fathers are qualified in school education, 10 percent of the respondents' fathers are qualified in diploma, 13 percent of the respondents' fathers are qualified in college education. The mean and standard deviation for school education fathers are 82.34 and 13.02 respectively. The mean and standard deviation for diploma fathers are 91.53 and 13.44respectively. The mean and standard deviation for college education fathers are 93.60 and 11.90 respectively. **The college education qualified fathers' student show high level of Environmental intelligence than others.**

It is inferred from the above table that, 65 percent of the respondents' parent occupation is Cooli, 27 percent of the respondents' parent occupation is self-employment, 5 percent of the respondents’ parent occupation is business and 3 percent of the respondents’ parent occupation is government employee. The mean and standard deviation of the Cooli parents are 82.20 and 13.81 respectively. The mean and standard deviation of the self-employed parents are 88.24 and 12.05 respectively. The mean and standard deviation of the business parents are 91.50 and 9.59 respectively. The mean and standard deviation of the government employee parents are 94.60 and 14.45 respectively. **The government employee parents’ students show high level of Environmental Intelligence than others.**

It is inferred from the above table that, 65 percent of the respondents’ parents income are Rs.50,000 – Rs.75,000 per year, 23 percent of the respondents’ parents income are Rs.75,000 – Rs.1,00,000 per year, 10 percent of the respondents’ parents income are Rs.1,00,000 – Rs.1,25,000 per year and 2 percent of the respondents’ parents income are Rs.1,25,000 – Rs.1,50,000 per year. The mean and standard deviation for respondents with Rs.50,000 – Rs.75,000 parents income are 81.71 and 13.90 respectively. The mean and standard deviation for respondents with Rs.75,000 – Rs.1,00,000 parents income are 89.03 and 10.53 respectively. The mean and standard deviation for respondents with Rs.1,00,000 – Rs.1,25,000 parent income are 91.67 and 11.56 respectively. The mean and standard deviation for the respondents with Rs.1,25,000 – Rs.1,50,000 parent income are 99.67 and 10.97 respectively. **The respondents with parents annual income of Rs.1,25,000 – Rs.1,50,000 shows the high level of Environmental Intelligence than others.**

It is inferred from the above table that, 6 percent of the respondents’ have 3 and less number of family members, 42 percent of the respondents’ have 4 family members, 33 percent of the respondents’ have 5 family members, and 19 percent of the respondents’ have 6 and more number of family members. The mean and standard deviation for the respondents with 3 and less family members are 86.33 and 13.25 respectively. The mean and standard deviation for the respondents with 4 family members are 84.60 and 13.20 respectively. The mean and standard deviation for the respondents with 5 family members are 85.02 and 12.44 respectively. The mean and standard deviation for the respondents with 6 and more family members are 83.87 and 16.59 respectively. **The respondents with 3 and less family members have high Environmental Intelligence than others.**

It is inferred from the above table that, 30 percent of the respondents' are living in a joint family, 54 percent of the respondents' are living in a nuclear family and 16 percent of the respondents' are living in a single parent family. The mean and standard deviation for the respondents living in a joint family are 85.50 and 15.13 respectively. The mean and standard deviation for the respondents living in a nuclear family are 82.27 and 12.93 respectively. The mean and standard deviation for the respondents living in a single parent family are 91.28 and 10.33 respectively. **The respondents living in a single parent family have high level of Environmental Intelligence than others.**

Table 4.4

t -TEST SHOWING RELATIONSHIP BETWEEN ENVIRONMENTAL INTELLIGENCE, ITS DIMENSIONS AND GENDER

	Gender	N	Mean	Std. Deviation	t-Value	Result at 5% level of significance
Recycling	female	115	25.45	5.52	0.08	NS
	male	39	27.18	4.41		
Pollution	Female	115	15.41	3.12	0.17	NS
	Male	39	16.15	2.27		
Natural Resources	Female	115	11.25	2.61	0.69	NS
	Male	39	11.44	2.09		
Daily Habits	Female	115	31.54	6.21	0.18	NS
	Male	39	33.00	4.99		
Total	Female	115	83.65	14.26	0.10	NS
	Male	39	87.77	10.88		

The above table 4.4 exhibits the details of Mean, Standard Deviation and t-value relationship between Environmental intelligence, its dimensions and gender.

It is inferred from the obtained **t-value** that there is no significant difference in Female and Male student’s environmental intelligence on Recycling. Since the calculated **t-value** (0.08) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the Female and Male student’s respondent significantly not differ in their environmental intelligence on Recycling.**

It is inferred from the obtained **t-value** that there is no significant difference in Female and Male student's environmental intelligence on Pollution. Since the calculated **t-value** (0.17) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the Female and Male student's respondent significantly not differ in their environmental intelligence on Pollution.**

It is inferred from the obtained **t-value** that there is no significant difference in Female and Male student's environmental intelligence on Natural Resources. Since the calculated **t-value** (0.69) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the Female and Male student's respondent significantly not differ in their environmental intelligence on Natural resources.**

It is inferred from the obtained **t-value** that there is no significant difference in Female and Male student's environmental intelligence on Daily habits. Since the calculated **t-value** (0.18) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the Female and Male student's respondent significantly not differ in their environmental intelligence on Daily habits.**

Table 4.5

t - TEST SHOWING RELATIONSHIP BETWEEN ENVIRONMENTAL INTELLIGENCE, ITS DIMENSIONS AND LOCALITY

	locality	N	Mean	Std. Deviation	t-Value	Result at 5% level of significance
Recycling	Urban	53	29.02	4.65	0.00	NS
	Rural	101	24.25	4.88		
Pollution	Urban	53	16.32	3.04	0.03	NS
	Rural	101	15.22	2.81		
Natural Resources	Urban	53	12.30	2.37	0.00	NS
	Rural	101	10.77	2.38		
Daily Habits	Urban	53	34.26	5.58	0.00	NS
	Rural	101	30.67	5.77		
Total	Urban	53	91.91	12.38	0.00	NS
	Rural	101	80.91	12.65		

The above table 4.5 exhibits the details of Mean, Standard Deviation and t-value relationship between Environmental Intelligence, its dimensions and locality.

It is inferred from the obtained t-value that there is no significant difference in Urban and Rural students' Environmental Intelligence on Recycling. Since the calculated t-value (0.00) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the Urban and Rural students' respondent significantly not differ in their Environmental intelligence on Recycling.**

It is inferred from the obtained t-value that there is no significant difference in Urban and Rural students' Environmental Intelligence on Pollution. Since the calculated t-value (0.03) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the Urban and Rural students' respondent significantly not differ in their Environmental intelligence on Pollution.**

It is inferred from the obtained t-value that there is no significant difference in Urban and Rural students' Environmental Intelligence on Natural Resources. Since the calculated t-value (0.00) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the Urban and Rural students' respondent significantly not differ in their Environmental intelligence on Natural Resources.**

It is inferred from the obtained t-value that there is no significant difference in Urban and Rural students' Environmental Intelligence on Daily Habits. Since the calculated t-value (0.00) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the Urban and Rural students' respondent significantly not differ in their Environmental intelligence on Daily Habits.**

Table 4.6

t - TEST SHOWING RELATIONSHIP BETWEEN ENVIRONMENTAL INTELLIGENCE, ITS DIMENSIONS AND MEDIUM OF STUDY

	locality	N	Mean	Std. Deviation	t-Value	Result at 5% level of significance
Recycling	English	71	26.73	5.41	0.07	NS
	Tamil	83	25.17	5.13		
Pollution	English	71	16.14	2.89	0.03	NS
	Tamil	83	15.13	2.89		
Natural Resources	English	71	11.30	2.31	0.99	NS
	Tamil	83	11.30	2.64		
Daily Habits	English	71	33.39	5.21	0.00	NS
	Tamil	83	30.64	6.24		
Total	English	71	87.56	13.33	0.02	NS
	Tamil	83	82.24	13.36		

The above table 4.6 exhibits the details of Mean, Standard Deviation and t-value relationship between Environmental Intelligence, its dimensions and medium of study.

It is inferred from the obtained t-value that there is no significant difference in English medium and Tamil medium students' Environmental Intelligence on Recycling. Since the calculated t-value (0.07) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English medium and Tamil**

medium students' respondent significantly not differ in their Environmental intelligence on Recycling.

It is inferred from the obtained t-value that there is no significant difference in English medium and Tamil medium students' Environmental Intelligence on Pollution. Since the calculated t-value (0.03) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English medium and Tamil medium students' respondent significantly not differ in their Environmental intelligence on Pollution.**

It is inferred from the obtained t-value that there is no significant difference in English medium and Tamil medium students' Environmental Intelligence on Natural Resources. Since the calculated t-value (0.99) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English medium and Tamil medium students' respondent significantly not differ in their Environmental intelligence on Natural Resources.**

It is inferred from the obtained t-value that there is no significant difference in English medium and Tamil medium students' Environmental Intelligence on Daily Habits. Since the calculated t-value (0.00) is not significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English medium and Tamil medium students' respondent significantly not differ in their Environmental intelligence on Daily Habits.**

Table 4.7

SIGNIFICANT DIFFERENT AMONG ENVIRONMENTAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR SCHOOL TYPE

		Sum of Squares	df	Mean Square	'F' Value	Significance at 5% level
Recycling	Between Groups	1579.15	2	789.58	43.83	S
	Within Groups	2719.97	151	18.01		
	Total	4299.12	153			
Pollution	Between Groups	251.17	2	125.58	17.90	S
	Within Groups	1059.87	151	7.02		
	Total	1311.04	153			
Natural Resources	Between Groups	187.91	2	93.96	18.81	S
	Within Groups	754.35	151	5.00		
	Total	942.26	153			
Daily Habits	Between Groups	2117.85	2	1058.93	48.68	S
	Within Groups	3284.88	151	21.75		
	Total	5402.73	153			
Total	Between Groups	12998.90	2	6499.45	64.70	S
	Within Groups	15169.76	151	100.46		
	Total	28168.66	153			

In order to find out whether there is any significant difference among environmental intelligence of higher secondary school students in respect of their school type 'F' value is calculated.

It is inferred from the obtained f-value that there is significant difference in type of school in their level of Environmental intelligence on Recycling. Since the calculated f-value (43.83) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students studying in different type of schools significantly differ in their Environmental Intelligence towards Recycling.**

It is inferred from the obtained f-value that there is significant difference in type of school in their level of Environmental intelligence on Pollution. Since the calculated f-value (17.89) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students studying in different type of schools significantly differ in their Environmental Intelligence towards Pollution.**

It is inferred from the obtained f-value that there is significant difference in type of school in their level of Environmental intelligence on Natural Resources. Since the calculated f-value (18.81) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students studying in different type of schools significantly differ in their Environmental Intelligence towards Natural Resources.**

It is inferred from the obtained f-value that there is significant difference in type of school in their level of Environmental intelligence on Daily Habits. Since the calculated f-value (48.68) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students studying in different type of schools significantly differ in their Environmental Intelligence towards Daily Habits.**

Table 4.8

SIGNIFICANT DIFFERENT AMONG ENVIRONMENTAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR MOTHERS' QUALIFICATION

		Sum of squares	df	Mean square	'f' value	Significance at 5% level
Recycling	Between Groups	254.45	2	127.23	4.75	S
	Within Groups	4044.67	151	26.79		
	Total	4299.12	153			
Pollution	Between Groups	72.94	2	36.47	4.45	S
	Within Groups	1238.10	151	8.20		
	Total	1311.04	153			
Natural Resources	Between Groups	55.40	2	27.70	4.72	S
	Within Groups	886.86	151	5.87		
	Total	942.26	153			
Daily Habits	Between Groups	459.73	2	229.87	7.02	S
	Within Groups	4942.99	151	32.74		
	Total	5402.73	153			
Total	Between Groups	2632.91	2	1316.45	7.79	S
	Within Groups	25535.75	151	169.11		
	Total	28168.656	153			

In order to find out whether there is any significant difference among environmental intelligence of higher secondary school students in respect of their mothers' qualification 'F' value is calculated.

It is inferred from the obtained f-value that there is significant difference in different mothers' qualification in their level of Environmental intelligence on Recycling. Since the calculated f-value (4.75) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students with different mother qualification significantly differ in their Environmental Intelligence towards Recycling.**

It is inferred from the obtained f-value that there is significant difference in different mothers' qualification in their level of Environmental intelligence on Pollution. Since the calculated f-value (4.45) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students with different mother qualification significantly differ in their Environmental Intelligence towards Pollution.**

It is inferred from the obtained f-value that there is significant difference in different mothers' qualification in their level of Environmental intelligence on Natural Resources. Since the calculated f-value (4.72) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students with different mother qualification significantly differ in their Environmental Intelligence towards Natural Resources.**

It is inferred from the obtained f-value that there is significant difference in different mothers' qualification in their level of Environmental intelligence on Daily Habits. Since the calculated f-value (7.02) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students with different mother qualification significantly differ in their Environmental Intelligence towards Daily Habits.**

Table 4.9

SIGNIFICANT DIFFERENT AMONG ENVIRONMENTAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR FATHERS' QUALIFICATION

		Sum of Squares	df	Mean Square	'F' value	Significance at 5% level
Recycling	Between Groups	547.33	2	273.67	11.01	S
	Within Groups	3751.79	151	24.85		
	Total	4299.12	153			
Pollution	Between Groups	45.53	2	22.77	2.72	NS
	Within Groups	1265.51	151	8.38		
	Total	1311.04	153			
Natural Resources	Between Groups	14.09	2	7.04	1.15	NS
	Within Groups	928.17	151	6.15		
	Total	942.26	153			
Daily Habits	Between Groups	474.08	2	237.04	7.26	S
	Within Groups	4928.65	151	32.64		
	Total	5402.73	153			
Total	Between Groups	2949.57	2	1474.78	8.83	S
	Within Groups	25219.09	151	167.01		
	Total	28168.66	153			

In order to find out whether there is any significant difference among environmental intelligence of higher secondary school students in respect of their fathers' qualification 'F' value is calculated.

It is inferred from the obtained f-value that there is significant difference in different fathers' qualification in their level of Environmental intelligence on Recycling. Since the calculated f-value (11.01) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students with different father qualification significantly differ in their Environmental Intelligence towards Recycling.**

It is inferred from the obtained f-value that there is no significant difference in different fathers' qualification in their level of Environmental intelligence on Pollution. Since the calculated f-value (2.72) which is not significant at 5% level. So the stated null hypothesis is accepted. **Therefore the students with different father qualification do not differ in their Environmental Intelligence towards Pollution.**

It is inferred from the obtained f-value that there is no significant difference in different fathers' qualification in their level of Environmental intelligence on Natural Resources. Since the calculated f-value (1.15) which is not significant at 5% level. So the stated null hypothesis is accepted. **Therefore the students with different father qualification do not differ in their Environmental Intelligence towards Natural Resources.**

It is inferred from the obtained f-value that there is significant difference in different fathers' qualification in their level of Environmental intelligence on Daily Habits. Since the calculated f-value (7.26) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students with different father qualification significantly differ in their Environmental Intelligence towards Daily Habits.**

Table 4.10

SIGNIFICANT DIFFERENT AMONG ENVIRONMENTAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR PARENTS' OCCUPATION

		Sum of Squares	df	Mean Square	'F' value	Significance at 5% level
Recycling	Between Groups	208.58	3	69.53	2.55	NS
	Within Groups	4090.54	150	27.27		
	Total	4299.12	153			
Pollution	Between Groups	83.09	3	27.70	3.38	S
	Within Groups	1227.95	150	8.19		
	Total	1311.04	153			
Natural Resources	Between Groups	17.25	3	5.75	.93	NS
	Within Groups	925.02	150	6.17		
	Total	942.26	153			
Daily Habits	Between Groups	420.95	3	140.32	4.23	S
	Within Groups	4981.78	150	33.21		
	Total	5402.73	153			
Total	Between Groups	1999.90	3	666.63	3.82	S
	Within Groups	26168.76	150	174.46		
	Total	28168.66	153			

In order to find out whether there is any significant difference among environmental intelligence of higher secondary school students in respect of their parents' occupation 'F' value is calculated.

It is inferred from the obtained f-value that there is no significant difference in different parents' occupation in their level of Environmental intelligence on Recycling. Since the calculated f-value (2.55) which is not significant at 5% level. So the stated null hypothesis is accepted. **Therefore the students with different parents' occupation do not differ in their Environmental Intelligence towards Recycling.**

It is inferred from the obtained f-value that there is significant difference in different parents' occupation in their level of Environmental intelligence on Pollution. Since the calculated f-value (3.38) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students with different parents' occupation significantly differ in their Environmental Intelligence towards Pollution.**

It is inferred from the obtained f-value that there is significant no difference in different parents' occupation in their level of Environmental intelligence on Natural Resources. Since the calculated f-value (0.93) which is not significant at 5% level. So the stated null hypothesis is accepted. **Therefore the students with different parents' occupation do not differ in their Environmental Intelligence towards Natural Resources.**

It is inferred from the obtained f-value that there is significant difference in different parents' occupation in their level of Environmental intelligence on Daily Habits. Since the calculated f-value (4.23) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students with different parents' occupation significantly differ in their Environmental Intelligence towards Daily Habits.**

Table 4.11

SIGNIFICANT DIFFERENT AMONG ENVIRONMENTAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR PARENTS' INCOME

		Sum of Squares	df	Mean Square	'F' value	Significance at 5% level
Recycling	Between Groups	301.93	3	100.64	3.78	S
	Within Groups	3997.20	150	26.65		
	Total	4299.12	153			
Pollution	Between Groups	96.74	3	32.25	3.98	S
	Within Groups	1214.30	150	8.10		
	Total	1311.04	153			
Natural Resources	Between Groups	14.58	3	4.86	.79	NS
	Within Groups	927.68	150	6.19		
	Total	942.26	153			
Daily Habits	Between Groups	650.55	3	216.85	6.85	S
	Within Groups	4752.18	150	31.68		
	Total	5402.73	153			
Total	Between Groups	2957.01	3	985.67	5.86	S
	Within Groups	25211.65	150	168.08		
	Total	28168.66	153			

In order to find out whether there is any significant difference among environmental intelligence of higher secondary school students in respect of their parents' income 'F' value is calculated.

It is inferred from the obtained f-value that there is significant difference in different parents' income in their level of Environmental intelligence on Recycling. Since the calculated f-value (3.78) which is significant at 5% level. So the stated alternate hypothesis is accepted.

Therefore the students with different parents' income significantly differ in their Environmental Intelligence towards Recycling.

It is inferred from the obtained f-value that there is significant difference in different parents' income in their level of Environmental intelligence on Pollution. Since the calculated f-value (3.98) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students with different parents' income significantly differ in their Environmental Intelligence towards Pollution.**

It is inferred from the obtained f-value that there is no significant difference in different parents' income in their level of Environmental intelligence on Natural Resources. Since the calculated f-value (0.79) which is not significant at 5% level. So the stated null hypothesis is accepted. **Therefore the students with different parents' income do not differ in their Environmental Intelligence towards Natural Resources.**

It is inferred from the obtained f-value that there is significant difference in different parents' income in their level of Environmental intelligence on Daily Habits. Since the calculated f-value (6.85) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students with different parents' income significantly differ in their Environmental Intelligence towards Daily Habits.**

Table 4.12

SIGNIFICANT DIFFERENT AMONG ENVIRONMENTAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR NUMBER OF FAMILY MEMBERS

		Sum of squares	**df**	**Mean square**	**'F' value**	**Significance at 5% level**
Recycling	Between Groups	12.18	3	4.06	.14	NS
	Within Groups	4286.95	150	28.58		
	Total	4299.12	153			
Pollution	Between Groups	12.07	3	4.02	.47	NS
	Within Groups	1298.97	150	8.66		
	Total	1311.04	153			
Natural Resources	Between Groups	6.68	3	2.23	.36	NS
	Within Groups	935.58	150	6.24		
	Total	942.26	153			
Daily Habits	Between Groups	6.40	3	2.13	.06	NS
	Within Groups	5396.33	150	35.98		
	Total	5402.73	153			
Total	Between Groups	50.61	3	16.87	.10	NS
	Within Groups	28118.05	150	187.45		
	Total	28168.66	153			

In order to find out whether there is any significant difference among environmental intelligence of higher secondary school students in respect of their number of family members 'F' value is calculated.

It is inferred from the obtained f-value that there is no significant difference in different number of family members in their level of Environmental intelligence on Recycling. Since the calculated f-value (0.14) which is not significant at 5% level. So the stated null hypothesis is accepted. **Therefore the students with different number of family members do not differ in their Environmental Intelligence towards Recycling.**

It is inferred from the obtained f-value that there is no significant difference in different number of family members in their level of Environmental intelligence on Pollution. Since the calculated f-value (0.47) which is not significant at 5% level. So the stated null hypothesis is accepted. **Therefore the students with different number of family members do not differ in their Environmental Intelligence towards Pollution.**

It is inferred from the obtained f-value that there is no significant difference in different number of family members in their level of Environmental intelligence on Natural Resources. Since the calculated f-value (0.36) which is not significant at 5% level. So the stated null hypothesis is accepted. **Therefore the students with different number of family members do not differ in their Environmental Intelligence towards Natural Resources.**

It is inferred from the obtained f-value that there is no significant difference in different number of family members in their level of Environmental intelligence on Daily Habits. Since the calculated f-value (0.06) which is not significant at 5% level. So the stated null hypothesis is accepted. **Therefore the students with different number of family members do not differ in their Environmental Intelligence towards Daily Habits.**

Table 4.13

SIGNIFICANT DIFFERENT AMONG ENVIRONMENTAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR FAMILY TYPE

		Sum of Squares	df	Mean Square	'F' value	Significance at 5% level
Recycling	Between Groups	142.79	2	71.39	2.59	NS
	Within Groups	4156.34	151	27.53		
	Total	4299.12	153			
Pollution	Between Groups	38.70	2	19.35	2.30	NS
	Within Groups	1272.34	151	8.43		
	Total	1311.04	153			
Natural Resources	Between Groups	32.83	2	16.42	2.73	NS
	Within Groups	909.43	151	6.02		
	Total	942.26	153			
Daily Habits	Between Groups	267.95	2	133.97	3.94	S
	Within Groups	5134.78	151	34.01		
	Total	5402.73	153			
Total	Between Groups	1603.95	2	801.97	4.56	S
	Within Groups	26564.71	151	175.93		
	Total	28168.66	153			

In order to find out whether there is any significant difference among environmental intelligence of higher secondary school students in respect of their family type 'F' value is calculated.

It is inferred from the obtained f-value that there is no significant difference in different family type in their level of Environmental intelligence on Recycling. Since the calculated f-value (2.59) which is not significant at 5% level. So the stated null hypothesis is accepted.

Therefore the students with different family type do not differ in their Environmental Intelligence towards Recycling.

It is inferred from the obtained f-value that there is no significant difference in different family type in their level of Environmental intelligence on Pollution. Since the calculated f-value (2.30) which is not significant at 5% level. So the stated null hypothesis is accepted. **Therefore the students with different family type do not differ in their Environmental Intelligence towards Pollution.**

It is inferred from the obtained f-value that there is no significant difference in different family type in their level of Environmental intelligence on Natural Resources. Since the calculated f-value (2.73) which is not significant at 5% level. So the stated null hypothesis is accepted. **Therefore the students with different family type do not differ in their Environmental Intelligence towards Natural Resources.**

It is inferred from the obtained f-value that there is significant difference in different family type in their level of Environmental intelligence on Daily Habits. Since the calculated f-value (3.94) which is significant at 5% level. So the stated alternate hypothesis is accepted. **Therefore the students with different family type significantly differ in their Environmental Intelligence towards Daily Habits.**

TABLE 4-17 CORRELATION ANALYSIS

	School Type	Gender	Locality	Medium of study	Mothers' Qualification	Fathers' Qualification	Parents' Occupation	Parent Income	Family Members	Family Type	Recycling	Pollution	Natural Resources	Daily Habits	Total Environmental Intelligence
School type		-0.01	-0.02	.69**	-.30**	-.38**	-.52**	-.40**	0.11	0.05	-0.04	-.17*	0.06	-0.14	-0.10
Gender			-0.14	-.24**	0.10	.17*	0.14	0.04	-.22**	-0.04	0.14	0.11	0.03	0.11	0.13
Locality				.18*	-0.09	-.18*	-0.06	-0.01	-0.01	0.04	-.43**	-.18*	-.29**	-.29**	-.39**
Medium of study					-.29**	-.35**	-.38**	-.31**	0.09	0.09	-0.15	-.17*	0.01	-.23**	-.20*
Mothers' Qualification						.36**	.18*	.25**	-0.03	0.06	.19*	0.09	.24**	.25**	.25**
Fathers' Qualification							.37**	.24**	-0.10	-0.08	.32**	.18*	0.12	.30**	.32**
Parents' Occupation								.67**	-0.04	-0.08	.21**	.24**	0.10	.25**	.26**
Parents' Income									0.04	-0.05	.26**	.23**	0.10	.33**	.32**
Family Members										-.55**	-0.01	-0.05	0.01	-0.03	-0.03
Family Type											0.08	0.03	0.09	0.09	0.09
Recycling												.42**	.59**	.66**	.88**
Pollution													.33**	.44**	.63**
Natural Resources														.55**	.72**
Daily Habits															.89**

Coefficient of correlation between school type and mothers' qualification, fathers' qualification, parents' occupation, parents' income and are found to be -.3, -.38, -.52, and -.40 significant at 0.01% level. Coefficient of correlation between school type and intelligence on pollution are found to be -.71 significant at 0.05% level. **Hence it is concluded that there is negative significant relationship between school type and mothers' qualification, fathers' qualification, parents' occupation, parents' income and intelligence on pollution.** But correlation between school type and medium of study is found to be .69 significant at 0.01% level. **Hence it is concluded that there is positive significant relationship between school type and medium of study.**

Coefficient of correlation between gender and medium of study, number of family members are found to be -.24 and -.22 significant at 0.01% level. **Hence it is concluded that there is negative significant relationship between gender and medium of study, number of family members.** But correlation between gender and fathers' qualification is found to be .17 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between gender and fathers' qualification.**

Coefficient of correlation between locality and fathers' qualification, intelligence on pollution are found to be -.18, and -.18 significant at 0.05% level and Coefficient of correlation between locality and intelligence on recycling, natural resources, daily habits, and total environmental intelligence are found to be -.43-.29, -.29 and -.39 significant at 0.01% level. **Hence it is concluded that there is negative significant relationship between locality and fathers' qualification, intelligence on recycling, pollution, natural resources, daily habits, and total environmental intelligence.** But correlation between locality and medium of study is found to be .18 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between locality and medium of study.**

Coefficient of correlation between medium of study and intelligence on pollution, and total environmental intelligence are found to be -.17, and -.20 significant at 0.05% level. Coefficient of correlation between medium of study and mothers' qualification, fathers' qualification, parents' occupation, parents' income, and intelligence on daily habits are found to be -.29, -.35, -.38, -.31, and -.23 significant at 0.01% level. **Hence it is concluded that there is negative significant relationship between medium of study and mothers' qualification, fathers' qualification, parents' occupation, parents' income, intelligence on pollution, daily habits, and total environmental intelligence.**

Coefficient of correlation between mothers' qualification, parents' occupation and intelligence on recycling are found to be .18 and .19 significant at 0.05% level. Coefficient of correlation between mothers' qualification and fathers' qualification, parents' income, intelligence on natural resources, daily habits, and total environmental intelligence are found to be .36, .25, .24, .25 and .25 significant at 0.01% level. **Hence it is concluded that there is positive significant relationship between mothers' qualification and fathers' qualification, parents' occupation, parents' income, intelligence on recycling, natural resources, daily habits, and total environmental intelligence.**

Coefficient of correlation between fathers' qualification and intelligence on pollution is found to be .18 significant at 0.05% level. Coefficient of correlation between fathers' qualification and parents' occupation, parents' income, intelligence on recycling, daily habits, and total environmental intelligence are found to be .37, .24, .32, .30 and .32 significant at 0.01%

level. **Hence it is concluded that there is positive significant relationship between fathers' qualification and parents' occupation, parents' income, intelligence on recycling, pollution, daily habits, and total environmental intelligence.**

Coefficient of correlation between parents' occupation, and parents' income, intelligence on recycling, pollution, daily habits, and total environmental intelligence are found to be .67, .21, .24, .25 and .26 significant at 0.01% level. **Hence it is concluded that there is positive significant relationship between parents' occupation, and parents' income, intelligence on recycling, pollution, daily habits, and total environmental intelligence.**

Coefficient of correlation between parents' income and intelligence on recycling, pollution, daily habits, and total environmental intelligence are found to be .26, .23, .33 and .32 significant at 0.01% level. **Hence it is concluded that there is positive significant relationship between parents' income and intelligence on recycling, pollution, daily habits, and total environmental intelligence.**

Coefficient of correlation between number of family members and family type is found to be -.55 significant at 0.01% level. **Hence it is concluded that there is negative significant relationship between number of family members and family type.**

Coefficient of correlation between intelligence on recycling and intelligence on pollution, natural resources, daily habits, and total environmental intelligence are found to be .42, .58, .66 and .88 significant at 0.01% level. **Hence it is concluded that there is positive significant relationship between intelligence on recycling and intelligence on pollution, natural resources, daily habits, and total environmental intelligence.**

Coefficient of correlation between intelligence on pollution and intelligence on natural resources, daily habits, and total environmental intelligence are found to be .33, .44 and .63 significant at 0.01% level. **Hence it is concluded that there is positive significant relationship between intelligence on pollution and intelligence on natural resources, daily habits, and total environmental intelligence.**

Coefficient of correlation between intelligence on natural resources and intelligence on daily habits, and total environmental intelligence are found to be .55 and .72 significant at 0.01% level. **Hence it is concluded that there is positive significant relationship between intelligence on natural resources and intelligence on daily habits, and total environmental intelligence.**

Coefficient of correlation between intelligence on daily habits and total environmental intelligence is found to be .89 significant at 0.01% level. **Hence it is concluded that there is positive significant relationship between intelligence on daily habits and total environmental intelligence.**

Table 4.15

STEPWISE REGRESSION BETWEEN ENVIRONMENTAL INTELLIGENCE AND THEIR SUB SAMPLES

Model	B	Std. Error	Beta	Pearson r	Sr^2	Structure Coefficient
(Constant)	89.105	4.387				
Locality	-9.974	2.006	-.350	-.386	.119	-.345
Parental income	4.850	1.290	.269	.318	.068	.261
FEQ	3.628	1.404	.188	.315	.032	.179

Note. The dependent variable **Environmental Intelligence**. R^2=0.280, Adjusted R^2=0.265.Sr^2 is squared semi-partial correlation. * $p < .05$. ***F (3,150)* =** 19.419.

The prediction model contained **three** of the fourteen predictors and was reached in three-steps with 11 variables removed. The model was statistically significant, ***F (3,150)* =** 19.419. p<.001 and accounted for approximately 28% of the variance of Environmental intelligence (R^2=0.067, Adjusted R^2=0.057). Environmental intelligence is primarily predicted by locality, parental income and followed by FEQ. The raw and standardized regression coefficient of predictors together with their correlation with Environmental intelligence, their squared semi-partial correlations, their structure coefficients are shown in table 4.15. The locality receives strongest weight and FEQ received the lowest weight in model. With the sizeable correlations between the predictors, the unique variance explained by each of the variables accounted by the squared semi-partial correlation was relatively low. The locality, parental income and FEQ uniquely accounted for approximately 12%, 7% and 3% of the Environmental intelligence.

Inspection of the structure coefficient suggests that, **the locality was relatively strong indicators of Environmental intelligence and Parental income and FEQ were relatively moderate indicators of Environmental intelligence.**

Table 4.16

STEPWISE REGRESSION BETWEEN ENVIRONMENTAL INTELLIGENCE AND THEIR SUB SCALES

Model	B	Std. Error	Beta	Pearson r	Sr^2	Structure Coefficient
(Constant)	1.776E-14	.000				
Daily habits	1.000	.000	.438	.890	.096	.310
Recycle	1.000	.000	.391	.875	.074	.272
Pollution	1.000	.000	.216	.634	.036	.190
Natural resources	1.000	.000	.183	.719	.020	.143

Note. The dependent variable **Environmental intelligence**. R^2=1, Adjusted R^2=1.Sr^2 is squared semi-partial correlation. * p< .05. ***F (4,149) =*** 0.

The prediction model contained one of the four predictors and was reached in four-steps with no variables removed. The model was statistically significant, ***F (4,149) =*** 0**,** p<.001 and accounted for approximately 100% of the variance of Environmental intelligence (R^2=1, Adjusted R^2=1). Environmental intelligence is primarily predicted by daily habits and followed by recycle, pollution, natural resources. The raw and standardized regression coefficient of predictors together with their correlation with Environmental intelligence, their squared semi-partial correlations, their structure coefficients are shown in table 4.16. The daily habits and recycle, receives strongest weight and pollution and natural resources received the lowest weight in model. With the sizeable correlations between the predictors, the unique variance explained by each of the variables accounted by the squared semi-partial correlation was relatively low. The daily habits, recycle, pollution and natural resources uniquely accounted for approximately 10%, 7%, 4% and 2% of the Environmental intelligence. Inspection of the structure coefficient suggests that, **the daily habits and recycle were relatively dominant factor of Environmental intelligence and pollution and natural resources were least influencing factor of Environmental intelligence.**

Chapter V

Summary, Findings Suggestions and Conclusion

CHAPTER V

SUMMARY, FINDINGS, SUGGESTIONS AND CONCLUSION

5.1 SUMMARY

In this study the environmental intelligence of the school students of Cuddalore district in Tamil Nadu were focused. 154 samples were collected from random sampling technique. A descriptive research method was utilized. This study is proposed to find out the levels of environmental intelligence of students and if there is any significant difference between the selected pairs of sub-samples. Higher Secondary school students' level of environmental intelligence: scale was constructed and standardized by the researcher and guide. The collected data were analyses with the statistical techniques. Descriptive, differential, correlational and regression analysis are carried out with the help of SPSSIBM23.

5.2 MAJOR FINDINGS

ENVIRONMENTAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS

- It is concluded that Environmental Intelligence of higher secondary school students is high.
- The self-financing students show high level of Environmental Intelligence than others.
- The Male Students show high level of Environmental Intelligence than Female Students.
- The students living in urban area show high level of Environmental Intelligence than the students living in rural area.

- The students studying in English medium show high level of Environmental Intelligence than the students studying in Tamil medium.
- The diploma qualified mothers' student show high level of Environmental intelligence than others.
- The college education qualified fathers' student show high level of Environmental intelligence than others.
- The government employee parents' students show high level of Environmental Intelligence than others.
- The respondents with parents annual income of Rs.1,25,000 – Rs.1,50,000 shows the high level of Environmental Intelligence than others.
- The respondents with 3 and less family members have high Environmental Intelligence than others.
- The respondents living in a single parent family have high level of Environmental Intelligence than others.
- It is concluded that the Female and Male student's respondent significantly not differ in their environmental intelligence on Recycling.
- It is concluded that the Female and Male student's respondent significantly not differ in their environmental intelligence on Pollution.
- It is concluded that the Female and Male student's respondent significantly not differ in their environmental intelligence on Natural resources.
- It is concluded that the Female and Male student's respondent significantly not differ in their environmental intelligence on Daily habits.

- It is concluded that the Urban and Rural students' respondent significantly not differ in their Environmental intelligence on Recycling.
- It is concluded that the Urban and Rural students' respondent significantly not differ in their Environmental intelligence on Pollution.
- It is concluded that the Urban and Rural students' respondent significantly not differ in their Environmental intelligence on Natural Resources.
- It is concluded that the Urban and Rural students' respondent significantly not differ in their Environmental intelligence on Daily Habits.
- It is concluded that the English medium and Tamil medium students' respondent significantly not differ in their Environmental intelligence on Recycling.
- It is concluded that the English medium and Tamil medium students' respondent significantly not differ in their Environmental intelligence on Pollution.
- It is concluded that the English medium and Tamil medium students' respondent significantly not differ in their Environmental intelligence on Natural Resources.
- It is concluded that the English medium and Tamil medium students' respondent significantly not differ in their Environmental intelligence on Daily Habits.
- The students studying in different type of schools significantly differ in their Environmental Intelligence towards Recycling.
- The students studying in different type of schools significantly differ in their Environmental Intelligence towards Pollution.
- The students studying in different type of schools significantly differ in their Environmental Intelligence towards Natural Resources.

- The students studying in different type of schools significantly differ in their Environmental Intelligence towards Daily Habits.
- The students with different mother qualification significantly differ in their Environmental Intelligence towards Recycling.
- The students with different mother qualification significantly differ in their Environmental Intelligence towards Pollution.
- The students with different mother qualification significantly differ in their Environmental Intelligence towards Natural Resources.
- The students with different mother qualification significantly differ in their Environmental Intelligence towards Daily Habits.
- The students with different father qualification significantly differ in their Environmental Intelligence towards Recycling.
- The students with different father qualification do not differ in their Environmental Intelligence towards Pollution.
- The students with different father qualification do not differ in their Environmental Intelligence towards Natural Resources.
- The students with different father qualification significantly differ in their Environmental Intelligence towards Daily Habits.
- The students with different parents' occupation do not differ in their Environmental Intelligence towards Recycling.
- The students with different parents' occupation significantly differ in their Environmental Intelligence towards Pollution.

- The students with different parents' occupation do not differ in their Environmental Intelligence towards Natural Resources.
- The students with different parents' occupation significantly differ in their Environmental Intelligence towards Daily Habits.
- The students with different parents' income significantly differ in their Environmental Intelligence towards Recycling.
- The students with different parents' income significantly differ in their Environmental Intelligence towards Pollution.
- The students with different parents' income do not differ in their Environmental Intelligence towards Natural Resources.
- The students with different parents' income significantly differ in their Environmental Intelligence towards Daily Habits.
- The students with different number of family members do not differ in their Environmental Intelligence towards Recycling.
- The students with different number of family members do not differ in their Environmental Intelligence towards Pollution.
- The students with different number of family members do not differ in their Environmental Intelligence towards Natural Resources.
- The students with different number of family members do not differ in their Environmental Intelligence towards Daily Habits.
- The students with different family type do not differ in their Environmental Intelligence towards Recycling.

- The students with different family type do not differ in their Environmental Intelligence towards Pollution.
- The students with different family type do not differ in their Environmental Intelligence towards Natural Resources.
- The students with different family type significantly differ in their Environmental Intelligence towards Daily Habits.
- It is concluded that there is negative significant relationship between school type and mothers’ qualification, fathers’ qualification, parents’ occupation, parents’ income and intelligence on pollution. It is concluded that there is positive significant relationship between school type and medium of study.
- It is concluded that there is negative significant relationship between gender and medium of study, number of family members. It is concluded that there is positive significant relationship between gender and fathers’ qualification.
- It is concluded that there is negative significant relationship between locality and fathers’ qualification, intelligence on recycling, pollution, natural resources, daily habits, and total environmental intelligence. Hence it is concluded that there is positive significant relationship between locality and medium of study.
- It is concluded that there is negative significant relationship between medium of study and mothers’ qualification, fathers’ qualification, parents’ occupation, parents’ income, intelligence on pollution, daily habits, and total environmental intelligence.
- It is concluded that there is positive significant relationship between mothers’ qualification and fathers’ qualification, parents’ occupation, parents’ income, intelligence on recycling, natural resources, daily habits, and total environmental intelligence.

- It is concluded that there is positive significant relationship between fathers’ qualification and parents’ occupation, parents’ income, intelligence on recycling, pollution, daily habits, and total environmental intelligence.
- It is concluded that there is positive significant relationship between parents’ occupation, and parents’ income, intelligence on recycling, pollution, daily habits, and total environmental intelligence.
- It is concluded that there is positive significant relationship between parents’ income and intelligence on recycling, pollution, daily habits, and total environmental intelligence.
- It is concluded that there is negative significant relationship between number of family members and family type.
- It is concluded that there is positive significant relationship between intelligence on recycling and intelligence on pollution, natural resources, daily habits, and total environmental intelligence.
- It is concluded that there is positive significant relationship between intelligence on pollution and intelligence on natural resources, daily habits, and total environmental intelligence.
- It is concluded that there is positive significant relationship between intelligence on natural resources and intelligence on daily habits, and total environmental intelligence.
- It is concluded that there is positive significant relationship between intelligence on daily habits and total environmental intelligence.
- The locality was relatively strong indicators of Environmental intelligence and Parental income and FEQ were relatively moderate indicators of Environmental intelligence.

- The daily habits and recycle were relatively dominant factor of Environmental intelligence and pollution and natural resources were least influencing factor of Environmental intelligence.

5.3 SUGGESTIONS

Following suggestions are given for future research.

- A similar study may be undertaken to study the level of Environmental Intelligence of college students to improve their environmental intelligence.
- A similar study may be undertaken to study the level of Environmental Intelligence of primary school students to inculcate the environmental intelligence to the children during the earlier stage.
- A similar study may be undertaken to study the level of Environmental Intelligence of high school students to improve their environmental intelligence to the children during the earlier stage.
- A similar study may be undertaken to study the level of Environmental Intelligence and its relationship with other factors like Aptitude, Attitude, Emotional Intelligence, General Intelligence, Leadership Qualities, Motivation and Personality.
- Comparative analysis can also be done among rural and urban primary school, high school and college students.

5.4 RECOMMENDATIONS:

The following recommendations are imposed by the researcher.

- Encourage students to plant trees in school and local community.
- Encourage students to develop home garden.
- Encourage students to participate with parents and grandparents those who are doing agriculture.
- Encourage the students to read magazines, newspapers related to Environmental issues.
- Encourage the students to prepare stab book related to Environmental awareness.
- Procession can be arranged for the protection of global Biosphere.
- Training must be given to the teachers regarding Environmental Protection.
- Developing loving attitude towards flora and fauna.
- Students should be guided properly to improve their environmental intelligence to build a green eco-friendly environment through seminars.

5.5 CONCLUSION

The present investigation clearly depicts that the Level of Environmental Intelligence of the higher secondary school students is high. The locality, the parental income and the fathers' educational qualification are the indicators of environmental intelligence. The intelligence on daily habits and recycling are the dominant factors of environmental intelligence. Environmental Intelligence can be nurtured in the school environment through curricular and co-curricular activities. It is the responsibility of the school to create and maintain the level of environmental intelligence in the young minds of pupil during the early years of study to develop eco-friendly citizens in future.

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Appendix-I

O.P.R MEMORIAL COLLEGE OF EDUCATION

VADALUR – 607303

A STUDY ON ENVIRONMENTAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS

Dear Students,

I have taken up a project work on “Environmental Intelligence of Higher Secondary School Students”. In this regard I seek your co-operation and responses. Kindly provide the data asked here and your responses will be used only for this project work.

Thank you

K. S. Afrin Begum

S.No	Personal Data	
1.	Type of the school	Self-Financing / Govt / Aided
2.	Age	
3.	Gender	Female / Male
4.	Locality	Urban / Rural
5.	Medium	English / Tamil
6.	Mother qualification	School Education / Diploma / College Education
7.	Father qualification	School Education / Diploma / College Education
8.	Parent occupation	Cooli / Self-employment / Business / Government
9.	Parent income	
10.	No. of family members	
11.	Family Type	Join family / Nuclear family / Single Parent family

Recyling

S.No	**Environmental intelligence scale**	**SA**	**A**	**N**	**D**	**SD**
1.	I use rechargeable batteries instead of disposable batteries. நான் செலவழிப்பு பேட்டரிகளுக்கு பதிலாக ரிச்சார்ஜபிள் பேட்டரிகளைப் பயன்படுத்துகிறேன்					
2.	I give old clothes to the people in need. நான் பழைய ஆடைகளை தேவைப்படும் மக்களுக்கு தருகிறேன்.					
3.	I throw the used batteries and bottles in the appropriate dustbins. நான் பயன்படுத்திய பேட்டரிகள் மற்றும் பாட்டில்களை பொருத்தமான குப்பைத் தொட்டியில் வீசுகிறேன்.					
4.	I use old newspapers for packing. நான் பழைய செய்தித்தாள்களை பொதிக்கு பயன்படுத்துகிறேன்.					
5.	I shop more than what I need. எனக்குத் தேவையானதை விட அதிகமாக ஷாப்பிங் செய்கிறேன்.					
6.	I separate waste materials into degradable and non-degradable in my house. கழிவுப்பொருட்களை எனது வீட்டில் மக்கும் மற்றும் மக்கா குப்பைகளாக பிரிக்கிறேன்.					
7.	When I buy a product I pay attention whether its case is recyclable. நான் ஒரு பொருளை வாங்கும்போது அதன் வழக்கு மறுசுழற்சி செய்ய முடியுமா என்பதில் கவனம் செலுத்துகிறேன்.					

Pollution

S.No	**Environmental intelligence scale**	**SA**	**A**	**N**	**D**	**SD**
1.	I use chemicals in my garden. எனது தோட்டத்தில் ரசாயனங்கள் பயன்படுத்துகிறேன்.					
2.	Global warming leads to increase in sea level. புவி வெப்பமடைதல் கடல் மட்டத்தை அதிகரிக்க வழிவகுக்கிறது.					
3.	Increase in number of industries leads to pollution and increasing climate change risk. தொழில்சாலைகளின் எண்ணிக்கையின் அதிகரிப்பு மாசுபாட்டிற்கும் காலநிலை மாற்ற அபாயத்திற்கும் வழிவகுக்கிறது.					
4.	Using more vehicles leads to air pollution. அதிக வாகனங்களைப் பயன்படுத்துவது காற்று மாசுபாட்டிற்கு வழிவகுக்கிறது					
5.	I always try to avoid plastics. நான் எப்போதும் பிளாஸ்டிக் தவிர்க்க முயற்சிக்கிறேன்.					

SA- Strongly Agree, A- Agree, N-Neutral,

D- Disagree, SD- Strongly Disagree

Natural Resources

S.No	Environmental intelligence scale	SA	A	N	D	SD
1.	I plant atleast a tree in a year. நான் ஒரு வருடத்தில் குறைந்தபட்சம் ஒரு மரத்தை நடவு செய்கிறேன்.					
2.	I use electricity from solar energy. நான் சூரிய சக்தியிலிருந்து மின்சாரத்தைப் பயன்படுத்துகிறேன்.					
3.	Cutting down of trees increases atmospheric temperature. மரங்களை வெட்டுவது வளிமண்டல வெப்பநிலையை அதிகரிக்கிறது.					
4.	We can cut as many trees for our use. நம் பயன்பாட்டிற்காக பல மரங்களை வெட்டலாம்					
5.	Mining leads to pollution. சுரங்கமானது மாசுபாட்டிற்கு வழிவகுக்கிறது					

Daily Habits

S.No	Environmental intelligence scale	SA	A	N	D	SD
1.	I save water by taking shorter showers. நான் குறுகிய குளியல் எடுத்து தண்ணீரை சேமிக்கிறேன்.					
2.	I use least possible water while washing hands and brushing. கைகளை கழுவி துலக்குகையில் நான் குறைந்தபட்சம் தண்ணீரைப் பயன்படுத்துகிறேன்.					
3.	I always use eco-friendly products to best of my knowledge. நான் எப்போதும் சூழல் நட்பு தயாரிப்புகளை எனது அறிவுக்கு ஏற்றவாறு பயன்படுத்துகிறேன்.					
4.	I use both sides of the paper while writing and drawing. நான் எழுதுவதற்கும் வரைவதற்கும் காகிதத்தின் இருபுறமும் பயன்படுத்துகிறேன்.					
5.	For saving energy, I turn off the lights and fans when they are not used. ஆற்றலைச் சேமிப்பதற்காக விளக்குகள் மற்றும் விசிறிகள் பயன்படுத்தப்படாதபோது அவற்றை அணைக்கிறேன்.					
6.	I use cycle when travelling to neighboring places . அண்டை இடங்களுக்குச் செல்லும்போது நான் மிதிவண்டியைப் பயன்படுத்துகிறேன்.					
7.	I always take cloth bags while going to shopping. ஷாப்பிங் செல்லும்போது நான் எப்போதும் துணி பைகளை எடுத்துக்கொள்கிறேன்.					
8.	I am aware of cyclones and floods and made things ready to face them. சூறாவளிகள் மற்றும் வெள்ளம் குறித்து நான் அறிந்திருக்கிறேன் அவற்றை எதிர்கொள்ளத் தயாராக இருந்தேன்.					
9.	I keep my surroundings clean to avoid spreading of diseases. நோய்கள் பரவாமல் இருக்க என் சுற்றுப்புறத்தை சுத்தமாக வைத்திருக்கிறேன்.					

SA-முழுவதும் ஒத்துகொள்கிறேன், A- ஒத்துகொள்கிறேன், N-முடிவெடுக்க முடியவில்லை,

D- மறுக்கிறேன், SD- முழுவதும் மறுக்கிறேன்

Appendix-II

O.P.R MEMORIAL COLLEGE OF EDUCATION

VADALUR – 607303

A STUDY ON ENVIRONMENTAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS

Dear Students,

I have taken up a project work on "Environmental Intelligence of Higher Secondary School Students". In this regard I seek your co-operation and responses. Kindly provide the data asked here and your responses will be used only for this project work.

Thank you

K. S. Afrin Begum

S.No	**Personal Data**	
1.	Type of the school	Self-Financing / Govt / Aided
2.	Age	
3.	Gender	Female / Male
4.	Locality	Urban / Rural
5.	Medium	English / Tamil
6.	Mother qualification	School Education / Diploma / College Education
7.	Father qualification	School Education / Diploma / College Education
8.	Parent occupation	Cooli / Self-employment / Business / Government
9.	Parent income	
10.	No. of family members	
11.	Family Type	Join family / Nuclear family / Single Parent family

Recyling

S.No	**Environmental intelligence scale**	**SA**	**A**	**N**	**D**	**SD**
1.	I use rechargeable batteries instead of disposable batteries. நான் செலவழிப்பு பேட்டரிகளுக்கு பதிலாக ரிச்சார்ஜபிள் பேட்டரிகளைப் பயன்படுத்துகிறேன்					
2.	I give old clothes to the people in need. நான் பழைய ஆடைகளை தேவைப்படும் மக்களுக்கு தருகிறேன்.					
3.	I throw the used batteries and bottles in the appropriate dustbins. நான் பயன்படுத்திய பேட்டரிகள் மற்றும் பாட்டில்களை பொருத்தமான குப்பைத் தொட்டியில் வீசுகிறேன்.					
4.	I use old newspapers for packing. நான் பழைய செய்தித்தாள்களை பொதிக்கு பயன்படுத்துகிறேன்.					
5.	I shop more than what I need. எனக்குத் தேவையானதை விட அதிகமாக ஷாப்பிங் செய்கிறேன்.					
6.	I separate waste materials into degradable and non-degradable in my house. கழிவுப்பொருட்களை எனது வீட்டில் மக்கும் மற்றும் மக்கா குப்பைகளாக பிரிக்கிறேன்.					
7.	When I buy a product I pay attention whether its case is recyclable. நான் ஒரு பொருளை வாங்கும்போது அதன் வழக்கு மறுசுழற்சி செய்ய முடியுமா என்பதில் கவனம் செலுத்துகிறேன்.					

Pollution

S.No	**Environmental intelligence scale**	**SA**	**A**	**N**	**D**	**SD**
1.	I use chemicals in my garden. எனது தோட்டத்தில் ரசாயனங்கள் பயன்படுத்துகிறேன்.					
2.	Global warming leads to increase in sea level. புவி வெப்பமடைதல் கடல் மட்டத்தை அதிகரிக்க வழிவகுக்கிறது.					
3.	Using more vehicles leads to air pollution. அதிக வாகனங்களைப் பயன்படுத்துவது காற்று மாசுபாட்டிற்கு வழிவகுக்கிறது					
4.	I always try to avoid plastics. நான் எப்போதும் பிளாஸ்டிக் தவிர்க்க முயற்சிக்கிறேன்.					

SA- Strongly Agree, A- Agree, N-Neutral,

D- Disagree, SD- Strongly Disagree

Natural Resources

S.No	**Environmental intelligence scale**	**SA**	**A**	**N**	**D**	**SD**
1.	I plant atleast a tree in a year. *நான் ஒரு வருடத்தில் குறைந்தபட்சம் ஒரு மரத்தை நடவு செய்கிறேன்.*					
2.	I use electricity from solar energy. *நான் சூரிய சக்தியிலிருந்து மின்சாரத்தைப் பயன்படுத்துகிறேன்.*					
3.	We can cut as many trees for our use. *நம் பயன்பாட்டிற்காக பல மரங்களை வெட்டலாம்*					

Daily Habits

S.No	**Environmental intelligence scale**	**SA**	**A**	**N**	**D**	**SD**
1.	I save water by taking shorter showers. *நான் குறுகிய குளியல் எடுத்து தண்ணீரை சேமிக்கிறேன்.*					
2.	I use least possible water while washing hands and brushing. *கைகளை கழுவி துலக்குகையில் நான் குறைந்தபட்சம் தண்ணீரைப் பயன்படுத்துகிறேன்.*					
3.	I always use eco-friendly products to best of my knowledge. *நான் எப்போதும் சூழல் நட்பு தயாரிப்புகளை எனது அறிவுக்கு ஏற்றவாறு பயன்படுத்துகிறேன்.*					
4.	For saving energy, I turn off the lights and fans when they are not used. *ஆற்றலைச் சேமிப்பதற்காக விளக்குகள் மற்றும் விசிறிகள் பயன்படுத்தப்படாதபோது அவற்றை அணைக்கிறேன்.*					
5.	I use cycle when travelling to neighboring places . *அண்டை இடங்களுக்குச் செல்லும்போது நான் மிதிவண்டியைப் பயன்படுத்துகிறேன்.*					
6.	I always take cloth bags while going to shopping. *ஷாப்பிங் செல்லும்போது நான் எப்போதும் துணி பைகளை எடுத்துக்கொள்கிறேன்.*					
7.	I am aware of cyclones and floods and made things ready to face them. *சூறாவளிகள் மற்றும் வெள்ளம் குறித்து நான் அறிந்திருக்கிறேன் அவற்றை எதிர்கொள்ளத் தயாராக இருந்தேன்.*					
8.	I keep my surroundings clean to avoid spreading of diseases. *நோய்கள் பரவாமல் இருக்க என் சுற்றுப்புறத்தை சுத்தமாக வைத்திருக்கிறேன்.*					

SA-முழுவதும் ஒத்துகொள்கிறேன், A- ஒத்துகொள்கிறேன், N-முடிவெடுக்க முடியவில்லை,

D- மறுக்கிறேன், SD- முழுவதும் மறுக்கிறேன்

Emotional Intelligence of Higher Secondary School Students in Cuddalore District

Ms L Bhuvaneswari

Increased Team Performance
Decreased occupational Stress
Improve Decision Making
Emotional Intelligence
Increased Leadership Ability
Increased Personal Well-being

A STUDY ON EMOTIONAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS

Dissertation Submitted To
TAMILNADU TEACHERS EDUCATION UNIVERSITY
In partial Fulfillment of the requirements
For the degree of

MASTER OF EDUCATION

Submitted by
BHUVANESWARI.L
(Reg. No.1040918MD002)

Under the Guidance of
Dr. D. PONMOZHI

Principal
O.P.R. Memorial College of Education, Vadalur

O.P.R. MEMORIAL COLLEGE OF EDUCATION

(Affiliated to Tamil Nadu Teachers Education University-(Chennai -5)
VADALUR-607 303
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I am indebted to my beloved family members for their cordial support during my dissertation work.

Place:

Date: **BHUVANESWARI. L**

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Chapter I

Introduction

CHAPTER – I

1.1 INTRODUCTION:

Emotional intelligence is a different type of intelligence. It’s about being “heart smart,” not just “book smart.” The evidence shows that emotional intelligence matters just as much as intellectual ability, if not more so, when it comes to happiness and success in life. Emotional intelligence helps you build strong relationships, succeed at work, and achieve your goals. It is the ability to identify, use, understand, and manage your emotions in positive and constructive ways. It's about recognizing your own emotional state and the emotional states of others. Emotional intelligence is also about engaging with others in ways that draw people to you.

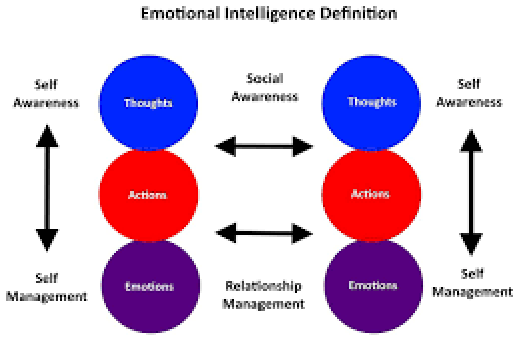
Emotional Intelligence is highly important in a teen’s development. There is considerable evidence pointing to its positive role in helping students deal with stress, develop relationships, and handle the transitions facing them.Let’s look at how Emotional Intelligence can play a role in students’ lives. EI helps us manage negative emotions and our behaviors in response to them. So, does it impact on how teens and students perform academically? EI has a large impact on students’ ability to deal with challenges such as developing new relationships and learning to live more independently, amongst other factors. Emotional management skills may play a pivotal part in helping students better handle the challenging aspects of academic life.

EMOTIONAL INTELLIGENCE:

Emotional intelligence refers to the capability of a person to manage and control his or her emotions and possess the ability to control the emotions of others as well. In other words, they can influence the emotions of other people also.

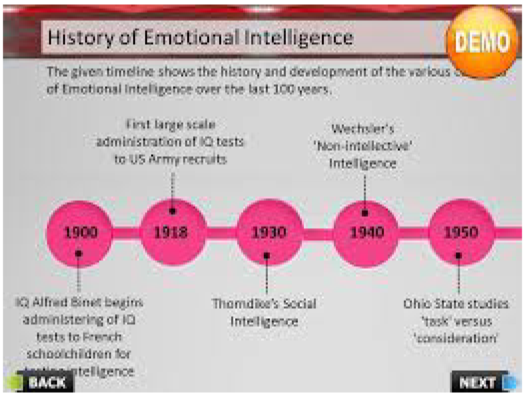
Description: Emotional intelligence is a very important skill in leadership. It is said to have five main elements such as - self-awareness, self-regulation, motivation, empathy, and social skills.

Emotional intelligence refers to the ability to identify and manage one’s own emotions, as well as emotions of others.



1.2.2 MEANING:

Emotional intelligence is generally said to include at least three skills: emotional awareness, or the ability to identify and name one’s own emotions; the ability to harness those emotions and apply them to tasks like thinking and problem solving; and the ability to manage emotions, which includes both regulating one’s own emotions when necessary and helping others to do the same..



History of Emotional Intelligence

The given timeline shows the history and development of the various of Emotional Intelligence over the last 100 years.

First large scale administration of IQ tests to US Army recruits

Wechsler's 'Non-intellective' Intelligence

IQ Alfred Binet begins administering of IQ tests to French schoolchildren for testing intelligence

Thorndike's Social Intelligence

Ohio State studies 'task' versus 'consideration'

Emotional intelligence (EQ) is the ability to identify and manage your emotions, as well as other people's emotions.

If you're emotionally intelligent you have the ability to:

- Identify what you're feeling
- Know how to interpret your emotions
- Understand how your emotions can impact others
- Regulate your own emotions

1.2.3 CHARACTERISTICS OF EMOTIONAL INTELLIGENCE:

1. Self-Awareness – People with high emotional intelligence are usually very self-aware . They understand their emotions, and because of this, they don't let their feelings rule them. They're confident – because they trust their intuition and don't let their emotions get out of control.

They're also willing to take an honest look at themselves. They know their strengths and weaknesses, and they work on these areas so they can perform better. Many people believe that this self-awareness is the most important part of emotional intelligence.

2. Self-Regulation – This is the ability to control emotions and impulses. People who self-regulate typically don't allow themselves to become too angry or jealous, and they don't make impulsive, careless decisions. They think before they act. Characteristics of self-regulation are thoughtfulness, comfort with change, integrity , and the ability to say no.

3. Motivation – People with a high degree of emotional intelligence are usually motivated . They're willing to defer immediate results for long-term success. They're highly productive, love a challenge, and are very effective in whatever they do.

4. Empathy – This is perhaps the second-most important element of emotional intelligence. Empathy is the ability to identify with and understand the wants, needs, and viewpoints of those around you. People with empathy are good at recognizing the feelings of others, even when those feelings may not be obvious. As a result, empathetic people are usually excellent at managing relationships , listening , and relating to others. They avoid stereotyping and judging too quickly, and they live their lives in a very open, honest way.

5. Social Skills – It's usually easy to talk to and like people with good social skills, another sign of high emotional intelligence. Those with strong social skills are typically team players. Rather than focus on their own success first, they help others develop and shine. They can manage disputes, are excellent communicators, and are masters at building and maintaining relationships.

1.2.4 CHANGING YOUR EMOTIONS WELL:

People who believe that emotions are the be-all-end-all of life often seek ways to “control” their emotions. You can’t. You can only react to them.

Emotions are merely the signals that tell us to pay attention to something. We can then decide whether or not that “something” is important and choose the best course of action in addressing it—or not.

There’s no such thing as a “good” or “bad” emotion—there are only “good” and “bad” reactions to your emotions.

Anger can be a destructive emotion if you misdirect it and hurt others or yourself in the process. But it can be a good emotion if you use it to correct injustices and/or protect yourself or others.

1.2.5 EMOTIONAL INTELLIGENCE – EQ OR EI:

A term created by two researchers – Peter Salavoy and John Mayer – and popularized by Dan Goleman in his 1996 book of the same name.

We define EI or EQ as the ability to:

- Recognize, understand and manage our own emotions
- Recognize, understand and influence the emotions of others

In practical terms, this means being aware that emotions can drive our behavior and impact people (positively and negatively), and learning how to manage those emotions – both our own and others – especially when we are under pressure.

When would I need to manage my Emotional Intelligence?

- Giving and receiving feedback
- Meeting tight deadlines
- Dealing with challenging relationships
- Not having enough resources
- Dealing with change
- Dealing with setbacks and failure

1.2.6 UNDERSTANDING THE FIVE CATEGORIES OF EMOTIONAL INTELLIGENCE (EQ):

1. Self-awareness. The ability to recognize an emotion as it “happens” is the key to your EQ. Developing self-awareness requires tuning in to your true feelings. If you evaluate your emotions, you can manage them. The major elements of self-awareness are:

- Emotional awareness. Your ability to recognize your own emotions and their effects.
- Self-confidence. Sureness about your self-worth and capabilities.

2. Self-regulation. You often have little control over when you experience emotions. You can, however, have some say in how long an emotion will last by using a number of techniques to alleviate negative emotions such as anger, anxiety or depression. A few of these techniques include recasting a situation in a more positive light, taking a long walk and meditation or prayer. Self-regulation involves

- Self-control. Managing disruptive impulses.
- Trustworthiness. Maintaining standards of honesty and integrity.
- Conscientiousness. Taking responsibility for your own performance.
- Adaptability. Handling change with flexibility.
- Innovation. Being open to new ideas.

3. Motivation. To motivate yourself for any achievement requires clear goals and a positive attitude. Although you may have a predisposition to either a positive or a negative attitude, you can with effort and practice learn to think more positively. If you catch negative thoughts as they occur, you can reframe them in more positive terms — which will help you achieve your goals. Motivation is made up of:

- Achievement drive. Your constant striving to improve or to meet a standard of excellence.
- Commitment. Aligning with the goals of the group or organization.
- Initiative. Readying yourself to act on opportunities.
- Optimism. Pursuing goals persistently despite obstacles and setbacks.

4. Empathy. The ability to recognize how people feel is important to success in your life and career. The more skillful you are at discerning the feelings behind others' signals the better you can control the signals you send them. An empathetic person excels at:

- Service orientation. Anticipating, recognizing and meeting clients' needs.
- Developing others. Sensing what others need to progress and bolstering their abilities.
- Leveraging diversity. Cultivating opportunities through diverse people.
- Political awareness. Reading a group's emotional currents and power relationships.
- Understanding others. Discerning the feelings behind the needs and wants of others.

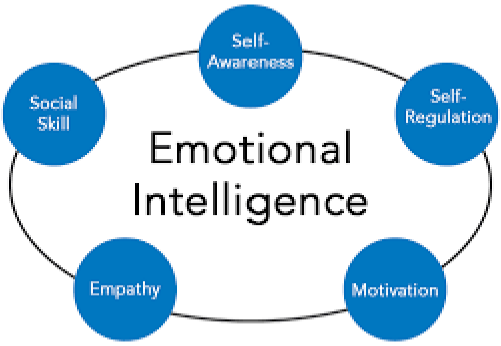
5. Social skills. The development of good interpersonal skills is tantamount to success in your life and career. In today's always-connected world, everyone has immediate access to technical knowledge. Thus, "people skills" are even more important now because you must possess a high EQ to better understand, empathize and negotiate with others in a global economy. Among the most useful skills are:

- Influence. Wielding effective persuasion tactics.
- Communication. Sending clear messages.
- Leadership. Inspiring and guiding groups and people.
- Change catalyst. Initiating or managing change.
- Conflict management. Understanding, negotiating and resolving disagreements.
- Building bonds. Nurturing instrumental relationships.

- Collaboration and cooperation. Working with others toward shared goals.
- Team capabilities. Creating group synergy in pursuing collective goals.

1.2.7 THE 5 FEATURES OF EMOTIONAL INTELLIGENCE:

Daniel Goleman determined that there are five fundamental features of EQ, each with their own benefits:



1. Self-awareness

Self-awareness is the ability to accurately recognise your: emotions, strengths, limitations, actions and understand how these affect others around you.

Benefits:

- Increases the likelihood of you handling and using constructive feedback effectively.
- By knowing your strengths and weaknesses you can improve your organisation's performance, for example, you may hire individuals who perform well in areas you struggle with.

Improve self-awareness by:

- Keeping a diary of the situations that have triggered disruptive emotions in you, such as anger, and your thoughts and behaviours during those situations. With this information you can form an understanding of your emotions and reactions and work towards self-regulation.
- Receiving feedback from staff as this can highlight how others perceive you and it also helps you target unhelpful reactions.
- Observing the response others have to your behaviour.

2. Self-regulation

Self-regulation allows you to wisely manage your emotions and impulses - you show or restrain certain emotions depending on what is necessary and beneficial for the situation. For example, rather than shouting at your employees when you're stressed you may decide which tasks can be delegated.

Benefits:

Self-regulation helps earn the respect and trust of employees.

- Useful when adapting to change.
- Allows you to react rationally.

Improve self-regulation by:

- Taking responsibility if you have made mistakes. Rather than blaming others admit that you are at fault. You'll feel less guilty and your team will respect you for it.
- Responding to situations calmly as your communication is more effective when you're in this state and this feeling will spread to others. Breathing techniques, such as controlled breathing, can be useful practice.

3. Empathy

To be empathetic means you are able to identify and understand others' emotions i.e. imagining yourself in someone else's position.

Benefits:

- Provides you with an understanding of how an individual feels and why they behave in a certain way. As a result, your compassion and your ability to help someone increases because you respond genuinely to concerns.
- Especially helpful when delivering constructive feedback.
- Being empathetic shows your team that you care. For example, if a manager reacts angrily after finding out that an employee has been arriving to work late because their child is unwell, the team is likely to react negatively towards the manager. It would be more favourable for the manager to be understanding and agree on a plan of action with the employee, such as, the employee starting work earlier and finishing later.
- Employees will respect you more and subsequently job performance will improve.

To develop empathy:

- Imagine yourself in someone else's position. Even if you have not experienced a similar situation, remember a situation where you have felt the same emotion your employee is experiencing.
- Practice listening to your employees without interrupting them.
- Observe your employees and try to gauge how they're feeling.
- Never ignore your employees' emotions, for example, if an employee looks upset don't disregard this - address it.
- Try to understand first rather than form a judgement. For example, you may initially feel annoyed at an employee who seems cold and disinterested. However, after discovering they suffer from social anxiety you may feel more sympathetic.
- To communicate your empathy keep your body language open and regulate your voice to show your sincerity.

4. Motivation

Being self-motivated consists of: enjoying what you do, working towards achieving your goals and not being motivated by money or status.

Benefits:

- Reduces your likelihood of procrastinating
- Increases self-confidence
- Keeps you motivated even if you face setbacks
- Makes you focused on achieving your goals
- Spreads to the team

To increase your motivation:

- Remember why you're doing your job - maybe think about why you wanted it initially.
- Set new goals if you lack them.
- Remain optimistic because to be motivated you must be positive. Even when there is a setback or a challenge identify one positive factor about it.
- To increase your employees' motivation explain why they are valuable, using example, as this will provide them with a sense of purpose.

5. **Social skills**

Effective social skills consist of managing relationships in a way that benefits the organisation.

Benefits:

- Effective social skills helps you to build rapport with your employees and earn their respect and loyalty.
- Employees will trust you which is especially valuable if unwelcomed decisions have been made, such as a rise in performance targets.
- When you interact with your employees you can identify the best way to meet their individual needs and identify how their abilities can be used to achieve the organisation's aims.
- Staff will feel comfortable presenting ideas to you and discussing concerns.

Improve social skills by:

- Developing your communication skills. Problems can arise if there is bad communication, such as, misunderstandings upsetting employees. Listen to feedback to work out what to target, for example, the manner in which you speak may need work or perhaps your body language.

- Learning how to provide praise and constructive feedback.
- Cooperating and working together with your employees because you are all working towards a shared goal.
- Listening to employees and practicing empathy.
- Building relationships with your employees will assist you in understanding how to manage each individual.
- Resolving conflict by looking at the situation from all the viewpoints involved and try to come to a compromise that benefits everyone.

1.2.8 EMOTIONAL INTELLIGENCE AFFECTS:

Performance at school or work. High emotional intelligence can help you navigate the social complexities of the workplace, lead and motivate others, and excel in your career. In fact, when it comes to gauging important job candidates, many companies now rate emotional intelligence as important as technical ability and employ EQ testing before hiring.

Physical health. If you're unable to manage your emotions, you are probably not managing your stress either. This can lead to serious health problems. Uncontrolled stress raises blood pressure, suppresses the immune system, increases the risk of heart attacks and strokes, contributes to infertility, and speeds up the aging process. The first step to improving emotional intelligence is to learn how to manage stress.

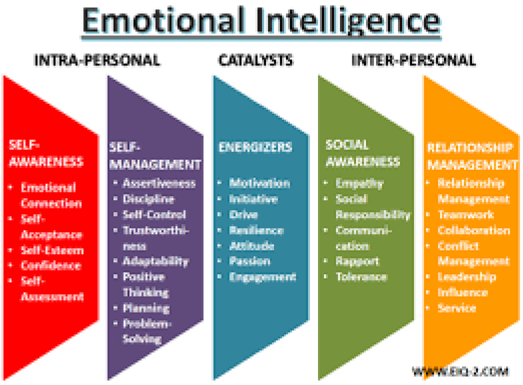
Mental health. Uncontrolled emotions and stress can also impact your mental health, making you vulnerable to anxiety and depression. If you are unable to understand, get comfortable with, or manage your emotions, you'll also struggle to form strong relationships. This in turn can leave you feeling lonely and isolated and further exacerbate any mental health problems.

Relationships. By understanding your emotions and how to control them, you're better able to express how you feel and understand how others are feeling. This allows you to communicate more effectively and forge stronger relationships, both at work and in your personal life.

Social intelligence. Being in tune with your emotions serves a social purpose, connecting you to other people and the world around you. Social intelligence enables you to recognize friend from foe, measure another person's interest in you, reduce stress, balance your nervous system through social communication, and feel loved and happy.

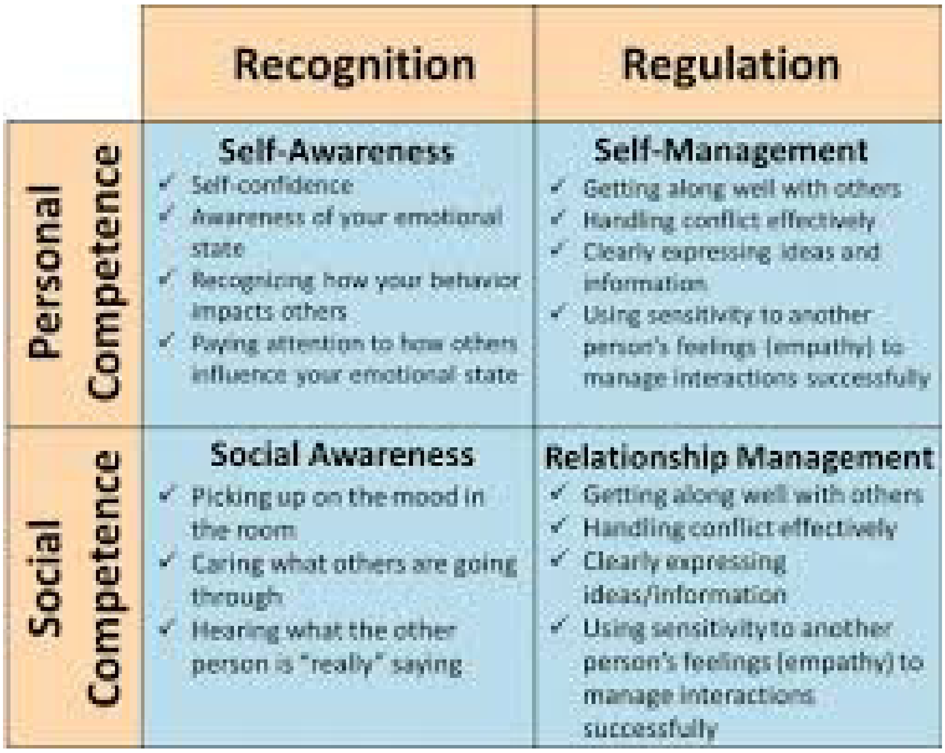
1.2.9 BUILDING EMOTIONAL INTELLIGENCE:

The skills that make up emotional intelligence can be learned at any time. However, it's important to remember that there is a difference between simply learning about EQ and applying that knowledge to your life. Just because you know you should do something doesn't mean you will—especially when you become overwhelmed by stress, which can override your best intentions. In order to permanently change behavior in ways that stand up under pressure, you need to learn how to overcome stress in the moment, and in your relationship in order to remain emotionally aware.



The key skills for building your EQ and improving your ability to manage emotions and connect with others are:

1. Self-management
2. Self-awareness
3. Social awareness
4. Relationship management



	Recognition	Regulation
Personal Competence	**Self-Awareness** ✓ Self-confidence ✓ Awareness of your emotional state ✓ Recognizing how your behavior impacts others ✓ Paying attention to how others influence your emotional state	**Self-Management** ✓ Getting along well with others ✓ Handling conflict effectively ✓ Clearly expressing ideas and information ✓ Using sensitivity to another person's feelings (empathy) to manage interactions successfully
Social Competence	**Social Awareness** ✓ Picking up on the mood in the room ✓ Caring what others are going through ✓ Hearing what the other person is "really" saying	**Relationship Management** ✓ Getting along well with others ✓ Handling conflict effectively ✓ Clearly expressing ideas/information ✓ Using sensitivity to another person's feelings (empathy) to manage interactions successfully

1.2.10 HIGH EMOTIONAL INTELLIGENCE:

In 1995, psychologist and science journalist Daniel Goleman published a book introducing most of the world to the nascent concept of emotional intelligence. The idea--that an ability to understand and manage emotions greatly increases our chances of success--quickly took off, and it went on to greatly influence the way people think about emotions and human behavior.

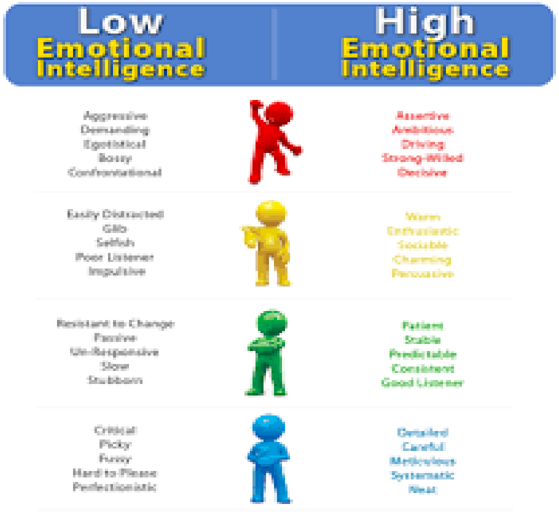
- **Think about feelings.**
- **Pause.**
- **Strive to control your thoughts.**
- **Benefit from criticism.**
- **Show authenticity.**
- **Demonstrate empathy.**
- **Praise others.**
- **Give helpful feedback.**
- **Apologize.**
- **Forgive and forget.**
- **Keep your commitments.**
- **Help others.**
- **Protect yourself from emotional sabotage.**

1.2.11 LOW EMOTIONAL INTELLIGENCE:

Low emotional intelligence is a problem that can have an influence on a wide variety of social relationships. Some experts even suggest that emotional intelligence may actually be more important than IQ in determining overall success in life.Think about the last time you got into an argument with someone else because they did not understand how you felt. Or consider the last time you had conflict with another person because you could not understand what they were feeling. In both cases, emotional intelligence might play a role in the underlying conflict.

Emotional intelligence can play a major role in how we interact with others. Sometimes coworkers, employers, friends, family members and other acquaintances might struggle with poor emotional skills that make social situations difficult and fraught with tension. In other cases, it might even be your own emotional intelligence skills that need a little work. An individual's level of emotional intelligence is often referred to as his or her emotional intelligence quotient, or EQ. Here are some of the classic signs of low emotional intelligence.

- Getting in Lots of Arguments
- Not Understanding How Others Feel
- Thinking That Other People Are Overly Sensitive
- Refusing to Listen to Other Points of View
- Blaming Others for Mistakes
- An Inability to Cope With Emotionally-Charged Situations
- Sudden Emotional Outbursts
- Difficulty Maintaining Friendships
- Lack of empathy



1.2.12 LACK OF EMOTIONAL INTELLIGENCE:

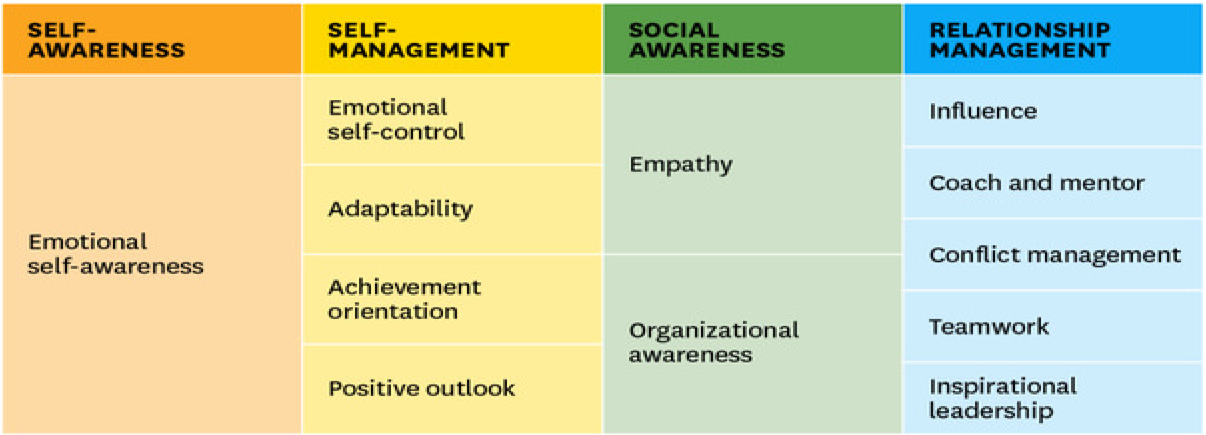
When emotional intelligence (EQ) first appeared to the masses, it served as the missing link in a peculiar finding: people with average IQs outperform those with the highest IQs 70% of the time. This anomaly threw a massive wrench into the broadly held assumption that IQ was the sole source of success.

Decades of research now point to emotional intelligence as being the critical factor that sets star performers apart from the rest of the pack. The connection is so strong that 90% of top performers have high emotional intelligence.

> **“No doubt emotional intelligence is more rare than book smarts, but my experience says it is actually more important in the making of a leader. You just can’t ignore it.” –Jack Welch**

Emotional intelligence is the “something” in each of us that is a bit intangible. It affects how we manage behavior, navigate social complexities, and make personal decisions to achieve positive results.

Emotional Intelligence Domains and Competencies



SELF-AWARENESS	SELF-MANAGEMENT	SOCIAL AWARENESS	RELATIONSHIP MANAGEMENT
Emotional self-awareness	Emotional self-control	Empathy	Influence
	Adaptability		Coach and mentor
	Achievement orientation	Organizational awareness	Conflict management
	Positive outlook		Teamwork
			Inspirational leadership

1.2.13 WHAT IS EQ?

According to the University of New Hampshire psychology department, emotional intelligence is the "ability to validly reason with emotions and to use emotions to enhance thought." EQ refers to an individual's ability to perceive, control, evaluate, and express emotions. People with high EQ can manage emotions, use their emotions to facilitate thinking, understand emotional meanings and accurately perceive others' emotions. EQ is partially determined by how a person relates to others and maintains emotional control.

1.2.14 WHAT IS IQ?

Intelligence quotient or IQ is a score received from standardized assessments designed to test intelligence. IQ relates directly to intellectual pursuits such as the ability to learn as well as understand and apply information to skill sets. IQ covers logical reasoning, word comprehension and math skills. People with higher IQ can think in abstracts and makeconnections by making generalizations easier.

1.2.15 DIFFERENCE BETWEEN IQ AND EQ:

EQ or say **Emotional Quotient** refers to a person’s ability to understand his/her emotion along with the other person’s emotions, whereas **IQ** stands for **Intelligence Quotient** indicates a person’s intelligence level.

Emotional Intelligence, or **emotional quotient (EQ)**, is defined as an individual's ability to identify, evaluate, control, and express emotions. People with high EQ usually make great leaders and team players because of their ability to understand, empathize, and connect with the people around them. **IQ**, or **intelligence quotient**, is score derived from one of several standardized tests designed to assess an individual's intelligence.

IQ is used to determine academic abilities and identify individuals with off-the-chart intelligence or mental challenges. EQ is a better indicator of success in the workplace and is used to identify leaders, good team players, and people who best work by themselves.

1.2.16 MEASUREMENT AND TESTING:

Although measuring EQ is very subjective, there are several standardized tests that measure emotional intelligence. Mayer-Salovey-Caruso Emotional Intelligence Test puts testers through a series of emotion-based problem-solving questions. The score reflects a person's capacity for reasoning with emotional information. Goleman's model of measurement focuses on emotional competencies.

Goleman's model utilizes one of two tests: the Emotional Competency Inventory or the Emotional Intelligence Appraisal. Both tests have their own set of proponents and critics.

Theorists have attempted to make IQ testing more objective. The Stanford-Binet test was the first true IQ assessment because it factored in age. The score is based on the test-taker's mental age, as evaluated by the test, divided by the chronological age multiplied by 100. American psychologist David Wechsler developed three IQ tests; one for preschool and primary children, one for older children and one for adults. The score is based on factor analysis. Sub-tests of the assessment are evaluated against age-based norms. Another commonly-used test is the Woodcock-Johnson Test of Cognitive Abilities. With the Woodcock-Johnson, extensive tests assess a wide variety of cognitive abilities. All three tests are still in use, and no one test is commonly considered the best or most accurate.

Pros and Cons of Testing

Both EQ and IQ testing is controversial. For EQ testing, proponents cite that EQ helps predict work success and teamwork ability. However, because emotional intelligence runs contrary to the conventional definitions of intelligence, testing is not an accurate predictor of academic or work success. So, while people with high EQ do well in the workplace, tests do not necessarily predict who has a high EQ. Part of the problem comes in the unreliability of the results. Often, people may not answer accurately because they're trying to do well. Therefore, by definition, the results are subjective.

IQ tests are in regular use in education especially, as well as other industries. Proponents of testing cite that it is a standardized assessment that shows intelligence transcends class, measures the need for special education and measures the effectiveness of special training and programs. IQ testing can also reveal unsuspected talents. But the limitation of these tests is that they provide limited information. They do not test underlying cognitive processes, nor do they predict success at work because they do not encompass non-academic intellectual abilities. Likewise, original or novel responses get marked as wrong even if they show intelligent thinking. Knowing an IQ score may limit children. Finally, IQ tests may reflect bias against minorities or other cultures with certain types of questions.

IQ represents abilities such as:

- Visual and spatial processing
- Knowledge of the world
- Fluid reasoning
- Working memory and short-term memory
- Quantitative reasoning

EQ, on the other hand, is a measure of a person's level of emotional intelligence. This refers to a person's ability to perceive, control, evaluate, and express emotions. Researchers such as John Mayer and Peter Salovey as well as writers like Daniel Goleman have helped shine a light on emotional intelligence, making it a hot topic in areas ranging from business management to education.

EQ is centered on abilities such as:

- Identifying emotions
- Evaluating how others feel
- Controlling one's own emotions

- Perceiving how others feel
- Using emotions to facilitate social communication
- Relating to others
- IQ is a number that signifies the relative intelligence of a person; the ratio multiplied by 100 of the mental age as reported on a standardized test to the chronological age. IQ is primarily used to measure one's cognitive abilities, such as the ability to learn or understand new situations; how to reason through a given problem/scenario; the ability to apply knowledge to one's current situations. It involves primarily the neo cortex or top portion of the brain.
- Over 140 – Genius or almost genius
- 120 – 140 – Very superior intelligence (Gifted)
- 110 – 119 – Superior intelligence
- 90 – 109 – Average or normal intelligence
- 80 – 89 – Dullness
- 70 – 79 – Borderline deficiency in intelligence
- Under 70 – Feeble-mindedness

1.2.17 EQ APPRAISAL:

Another way of looking at the assessment of EI is an EQ appraisal. One example of an EQ appraisal is the Emotional Intelligence Appraisal that features in the best-selling work '*Emotional Intelligence 2.0*' (Bradberry & Su, 2006). The appraisal was created in 2001 by Dr. Travis Bradberry and Dr. Jean Greaves and it may be administered in either online form or in a booklet. You can find more

The EQ appraisal is a skill-based assessment based on Daniel Goleman's four-factor taxonomy (Bradberry & Su, 2006). According to Goleman, EI consists of four components:

- self-awareness,
- self-management,
- social awareness and
- relationship management.

1.2.18 EQ SCORE MEAN:

EQ is an emotional quotient score. It is found by assessing the behavioral factors that reflect EI. For example, the EQ score reflects the way in which a person reacts in a variety of situations, including:

- Stressful or frustrating situations
- Failures, or disappointing situations
- Positions of leadership
- How an individual manages the emotions of people of a range of different ages, and
- Handling diversity and cultural sensitivities (My Frameworks, 2017).

1.2.19 THE EMOTIONAL AND SOCIAL COMPETENCE INVENTORY (ESCI):

This is used to measure EI and enables workplaces to raise awareness of EI based on feedback (CREIO, 2018).

A multi-rater assessment, this test also encourages the coaching and development of crucial work capabilities. It takes approximately 30 – 45 minutes to administer.

It looks at the following competency scales:

- emotional self-awareness,
- emotional self-control,
- adaptability,
- achievement orientation,
- positive outlook,
- empathy,
- organizational awareness,
- coach and mentor,
- inspirational leadership,
- influence,
- conflict management and
- teamwork (CREIO, 2018).

1.3 SIGNIFICANCE OF THE STUDY:

Emotional intelligence is the ability to understand, use, and manage your own emotions in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges and defuse conflic. Many people believe that this self-awareness is the most important part of emotional intelligence. Self-Regulation – This is the ability to control emotions and impulses. People who self-regulate typically don't allow themselves to become too angry or jealous, and they don't make impulsive, careless decisions.

1.4 NEED OF THE STUDY:

Emotional intelligence is the gateway to living a more fulfilled and happy life, and here's why: Emotional intelligence allows you to understand and manage your emotions in order to self-motivate and to create positive social interactions; it's the first step in realizing your true potential.Emotional intelligence is the capacity to understand and manage your emotions. The skills involved in emotional intelligence are self-awareness, self-regulation, motivation, empathy, and social skills.

1.5 STATEMENT OF THE PROBLEM:

A study on Emotional Intelligence of higher secondary school students in Cuddalore district.

1.6 OPERATIONAL DEFINITION:

The following are the operational definitions of the terms used in the present study.

1.6.1 EMOTIONAL INTELLIGENCE: An ability of the school students to identify, regulates and manage emotions in the self and in others.

1.6.2 HIGHER SECONDARY SCHOOL STUDENTS: A person studying in higher secondary schools in Government, Aided and self financing schools.

1.7 OBJECTIVES:

- To identify the Emotional Intelligence in Higher secondary school students.
- To assess the relationship between Emotional Intelligence and subsamples.
- When to find the predictor of Emotional intelligence.
- When to find the dominant of Emotional Intelligence factor.

1.8 Hypothesis:

- There is no significance difference between boys and girls in the level of emotional intelligence.
- There will be a significant difference between urban and rural school students.
- There is no predictor of emotional intelligence of higher secondary school students.
- There is significant difference between urban female and rural female school students.

1.9 Methodology:

The normative survey method has been used. By using random sampling technique 252 higher secondary students are selected from Cuddalore district andused as subject of this study.

1.10 Tools used:

The Emotional Intelligence Scale standardized by Hyde, A., et al(2001) has been utilized to collect the data from the above mentioned sample of the study. The Emotional Intelligence Scale comprises of ten sub scales viz; Self awareness, empathy, self motivation, emotional stability, managing relations, integrity, self-development, value orientation, commitment and altruistic behaviour.

1.11Population:

The students studying in Higher secondary schools are considered as population of the study.

1.12 Sample:

The random sampling technique was used to collect 252 student respondents studying in Government, Self-financing and Aided higher secondary schools situated in Cuddalore district.

1.13 Statistical Techniques used:

The collected data are analysed with the help if **IBMSPSS23**. Descriptive analysis, Inferential analysis, Correlation analysis and Regression analysis are made to bring suitable statistical conclusion.

1.14. Limitations:

The main limitations of the study are as follows,

- This study is confirmed to the higher secondary school students.
- It is confined only with the 252 students of Cuddalore district.
- The investigator has selected restricted variables in different statistical treatments. Respondents are causal in nature.
- The investigator applied only descriptive, differential, correlation, components of statistics.
- The investigator found the correlation of selected variables only.

Chapterization:

- Chapter II contains a Review of Related Literature.
- Chapter III contains Methodology, the description of tools, the sample selection and the Statistical techniques used in this study.
- Chapter IV contains the Analysis and interpretation of Data. The summary of important findings and discussion of the result.
- Chapter V contains the summary of important findings and discussion of the result, suggestions for the future work and conclusions.

Chapter II

Review of Related Literature

CHAPTER – II

INTRODUCTION

A study of review of literature is very important step, not only in finding a problem but also in the formation of hypothesis and in the selection of methods and tools to be employed in the interpretation of results. A familiarity with the literature in any problem area helps the student to discover what is already known, what others have attempted to find out and what problems remain to be solved. Moreover, a brief analysis of related literature is also helpful for the investigator in giving future suggestion by avoiding duplication. So the study related literature plays a vital role in the field of research in education.

The importance of reviewing studies made earlier in one's field of investigation need not be overemphasized. A literature review is an account of what has been published on a topic by accredited scholars and researchers. Occasionally you will be asked to write one as a separate assignment (sometimes in the form of annotated bibliography), but more often it is part of the introduction to an essay, research report, or thesis. In writing the literature review, your purpose is to convey to your reader what knowledge and ideas have been established on a topic, what their strengths and weaknesses are. As a piece of writing, the literature review must be defined by a guiding concept

A literature review shows your readers that you have an in-depth grasp of your subject; and that you understand where your own research fits into and adds to an existing body of agreed knowledge.

John, Swati and Niyogi, Dr. Shyamalendu(2019) The purpose of emotional intelligence is felt necessary because it is an unseen attribute of each and every person which needs to be identified and evaluated as per the needs of certain task, activity and event, where one is involved. The proposed research project aims at exploring the concept of emotional intelligence and its impacts on leadership and teamwork effectiveness. Like other competitive skills and personality aspects the notion of EI has attracted enormous popularity at academic and organizational levels. Academic institutions endeavour to develop emotionally intelligent students in order to prepare them for working effectively in their work environment. On the other hand different organizations are more inclined towards recruiting EI employees as trainers, and making investments in hiring EI professional staff and providing training to their existing workforce in order to achieve competitive edge in today's competitive work environment. Despite gaining such an enormous popularity the subject of EI remained controversial and debates exist among different scholars and researchers on different aspects of EI.The paper is focusing on the impact of emotional intelligence and knowledge management on leadership qualities.For this purpose two researchers have conducted a comprehensive study of the existing literature on the subject matter that covers; an analysis of the existing models of EI; review of debates and controversies that exist among the scholars on the subject; and different strategies through which EI can be developed on academic and organizational context.

Hökkä, P., Vähäsantanen, K. & Paloniemi, S.(2019) The research elaborating emotions in organizational settings has increased considerably in recent years. However, we lack a comprehensive understanding of the role of emotions in learning at work. This review aimed to elaborate how emotions and learning are understood in the field of workplace studies, and how emotions and learning at work are related. For the review, 31 scientific articles were selected and analysed. We found that emotions and learning were understood in a range of ways in the articles. Emotions were mainly defined as emotional experiences and responses, and learning at work mainly referred to learning through participatory practices. In addition, the review illustrates the relationship between emotions and learning at work. Most of the studies focused on the active role of emotions in supporting and/or hindering learning at work, but some indicated the contrary direction of influence, with emotions at work being influenced by learning. The review further illustrates trends and gaps in this research field, and suggests some theoretical underpinnings, with recommendations for future research.

Reena Agarwal., & Nisha Singh.(2018). The aim of the present investigation is to study of emotional intelligence and self concept of boys and girls perceived by secondary schools. Sample for the study consist of 80 boys and 75 girls drawn from Ghaziabad dist. Emotional intelligence test by Dr.Hyde, pethe and Dhar and Self concept test by Dr.Sherry Varma and Goswami were used for data collection. Means, S.D. and t-test calculated to analyse the data. The findings reveal that there is a significant difference found between Emotional intelligence of boys and girls students while there is no significant difference found between self concept of boys and girls of secondary schools.

Shobha Upadhyay.(2018). The present study is intended to examine the adjustment problems of secondary school students. Adjustment is a process by which a living organism maintains a balance between the needs and the circumstances. The students who are emotionally intelligent, who know how to manage their feelings well will have a better adjustment with themselves as well as with others. Emotionally healthy individuals accept themselves with all their strengths and weakness therefore behave in a mature way. A co-relational study was conducted on 100 students. The data were collected with the help of adjustment; inventory for school students constructed by Dr.A.K.P.Sinha, and emotional intelligence inventory developed by Dr.S.K.Mangal and Mrs.Shubra Mangal. The data collected were analyzed by using statistical techniques such as Mean, standard deviation and t-value. The data were analyzed to interpret the influence of emotional intelligence on adjustment. The findings of the study have shown that adjustment of school students is significantly correlated with their emotional intelligence.

Smita Bhawalkar., & Swati Amalnerkar.(2018). Starting that phrases like emotional intelligence have found a proper in the corporate world, the author states that institutions of management education too are focusing on training the learners to develop their emotional intelligence.

Sivakalai, T. & Mrs.Nalinilatha. (2017). Emotional intelligence is a type of intelligence that involves the ability to monitor, understand one's own and others emotions, to discriminate among them and to use the information to guide one's thinking and actions. It is the capacity to process emotional information accurately and efficiently taking into account information relevant to the recognition, construction and regulation of emotion in oneself and others. The study aimed to examine the Emotional intelligence and it impact on academic achievement in zoology among higher secondary students. The investigator adopted survey method to study the Emotional intelligence and it impact on academic achievement in zoology among higher secondary students. For this study a sample of 300 higher secondary students from five Govt and Private schools which are situated in and around Coimbatore district in Tamil Nadu were selected by the investigator using simple random sampling technique. The findings reveal that is inferred that there is a difference in the level of emotional intelligence and achievement in zoology among higher secondary students.

Binulal,K.R.(2015). Emotional intelligence is considered to be the most important determinant of success in professional and personal life among human beings. Schools have a vital role in preparing students to develop social roles. In order to achieve this, the teachers need to be equipped with socio-emotional intelligence. This will help the teachers to practice a set of skills needed to successfully manage the life tasks such as learning, forming relationships, communicating effectively, being sensitive to others' needs and getting along with others. The present study is an attempt to investigate the relationship of emotional intelligence on social skills and teaching competency of prospective teachers. Here the investigator used survey method to collect data from a sample of 350 student teacher. The result of the study reveals that there exists a significant positive relationship between emotional intelligence and social skills and emotional intelligence and teaching competency. Moreover the findings of the study recommend that innovative programmes of emotional intelligence and social skills should be practiced within teacher education programme to provide student teacher with additional teaching skills to meet the challenges of an increasingly diverse student population.

Joiceswarnalatha, R. (2015). Education is illumination. It plays extremely significant role in the lives of individuals by empowering them with various abilities, skills, competencies, and thus paving way for enhancing the quality of life. The students come from various backgrounds such as rural and urban regions. The students undergo a lot of pressure to with stand today's competition, mainly at the moment of their establishment stage in career. In order to cope up with the stress and pressure of today's competitive world, the students should have a balance in their emotional stability. Emotional Intelligence is a type of intelligence that has been heavily studied in social sciences, psychology and business sector, but not in educational area. The present study helps us to know about the emotional intelligence levels of students in the post graduation specifically the students coming from rural and urban regions. It is a comparative study of emotional intelligence levels of students belonging to rural and urban backgrounds, so that it is helpful to assess the student's emotionality, well-being, sociability and self control. By this which back ground students can easily cope up with the today's competition in the market can be identified which will help the faculties to have much concentration on the students depending on their backgrounds. Along with this the impact of EI on their academic performance is also studied .so that it will be helpful for the faculties to develop the EI along with their academic performance.

Ponmozhi1,D.&Nellaiyapen, N.O.(2015). The present investigation has been undertaken in order to study the Emotional Intelligence of student teacher in Tamil Nadu state. By using the random sampling technique 622 student teachers were selected from various education colleges in Tamil Nadu state. Normative survey method was used. This study is intended to find out the levels of Emotional intelligence of student teachers and if there is any significant difference between the selected pairs of sub-samples. Emotional Intelligence scale constructed and validated by Hyde, Dhar, & Pethe, (2001) was used to collect the data. This study reveals that the majority of student teachers Emotionally Intelligence were high. There exists significant difference between sub samples related to email holders, and the type of college they studied.

Ponmozhi1,D.&Nellaiyapen, N.O.(2015). The present investigation has been undertaken in order to study the Emotional Intelligence of student teacher in Tamil Nadu state. By using the random sampling technique 622 student teachers were selected from various education colleges in Tamil Nadu state. Normative survey method was used. This study is intended to find out the levels of Emotional intelligence of student teachers and if there is any significant difference between the selected pairs of sub-samples. Emotional Intelligence scale constructed and validated by Hyde, Dhar, & Pethe, (2001) was used to collect the data. This study reveals that the majority of student teachers Emotionally Intelligence were high. There exists significant difference between sub samples related to email holders, and the type of college they studied.

Ponmozhi1,D.&Nellaiyapen, N.O.(2015). This research paper is based on the premise that emotional intelligence is required to support the teachers for the purpose of improving their teaching competency. This paper explores the relationship between emotional intelligence and teaching competency of student teachers. The sample consists of student teachers from various colleges of Tamilnadu through random sampling. The Emotional Intelligence Scale –by Upinder dhar, Anukool Hyde & Sanjyot Pethe and Teaching Competency Scale constructed and standardized by the researchers was used to collect the data. Collected data was tabulated and subjected to statistical analysis. The stepwise regression results revealed that there was significant positive relationship between emotional intelligence and teaching competency of student teachers. Furthermore, it was found that among the ten components of EI, two subscales of emotional stability, self awareness and overall EI were positive predictors of teaching competency of student teachers.

Rajkumari J Punjabi.(2015). Teaching is considered as the noblest and most influential profession in the society. Teachers can and have great influence on the lives of students through their teachings, behavior, personality, attitudes and values. Emotional intelligence (EI) is the ability to identify, use, understand, and manage emotions in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges, and defuse conflict, emotional intelligence impacts many different aspects of your daily life, such as the way you behave and the way you interact with others. This paper explores emotional intelligence among B.Ed. teacher educator and survey method was used to assess it. The study identified that Mayer and Salovey’s five essential aspects of EI are accepted however there are marginal differences with respect to stream among B.Ed. teachers.

Sheeba Beracah,K.L.(2015). An attempt was made to find out the level of emotional intelligence of prospective teachers and to assess the influence of locality of college, community, birth order and nature of college on the emotional intelligence of prospective teachers of southern districts of Tamilnadu (Kanyakumari, Tirunelveli and tuticorin). Anukool Hyde, et al Emotional Intelligence Scale was administered on a random sample of 900 prospective teachers. The prospective teachers differ in their emotional intelligence in relation to their locality of college, community, birth order, and nature of college.“Any one can become angry-that is easy. But to be angry with the right person, to the degree, at the right time, for the right purpose and in the right way-that is not easy.

Trehan, K., & Rigg, C. (2015). This article seeks to develop the understanding of critical action learning (CAL) and to make a contribution to its theory and practice. The article begins by conceptualising critical action learning and builds on the work of Revans (1982) to stimulate fresh thinking. It provides a different calibration of his coupling of action and learning. An account of the research approach and methods is then provided. The findings demonstrate how CAL enriches the learning process by recognising the centrality of emotional and power relations. The aims of the article are to illuminate how CAL can be enacted and to address the gap that occurs where much of the work in this area operates on a theoretical plane but is often limited on practical guidance.

Abraham,Y.(2014). In this study the investigator fids that there is a direct significant relationship between Emotional Intelligence and self-esteem of professional course students, besides the existence of a positive and significant relationship between Emotional Intelligence and Academic Achievement of professional course students.

Anita Menon,&Shweta.(2014).he present study investigates effect of, emotional intelligence social intelligence and spiritual intelligence on academic achievement of college students. The sample was drawn of B.A 1st , 2nd and 3rd year students from Sri Guru Arjan Dev Government college of Tarn Taran district affiliated to Guru Nanak Dev University

Amritsar.. A 2x2 two way analysis of variance was used to arrive at the following conclusions:

Neha Sharma.(2014). The present study was aimed at developing "Emotional Intelligence Scale "with five dimensions namely Self-Awareness: [Emotional awareness, Accurate Self-Assessment, Self-Confidence], Self-Regulation: [Self-Control, Trust Worthiness, Conscientiousness, Adaptability, Innovation], Motivation [Achievement Drive, Commitments, Initiative, Optimism], Empathy: [Understanding Others, Developing Others, Leveraging Diversity, Political Awareness[, Social Skill: [Influence, Communication, Conflict Management, Leadership, Change Catalyst, Building Bonds, Collaboration & Cooperation, Team Capabilities[. After consulting 25 experts in the field of educational psychology 65 items were selected from 82 items. A purposive sample of 50 secondary school students (25 males and 25 females) was selected from secondary schools of Aligarh city. For ensure content validity. A sample of 400 secondary school students (200 males and 200 females) from secondary schools of Aligarh city was selected for the final try-out item analysis and 50 items were retained on the basis of t-value. The reliability of the test was found to be 0.745 by split half method. The content validity of the scale is ensured.

Ponmozhi1,D.&Nellaiyapen, N.O.(2014). Studies have indicated the relationship between Emotional Intelligence (EI) and teaching competencies of student teachers. This study investigates this association among student teachers. The sample consisted of student teachers from various colleges of Tamilnadu through random sampling. The Emotional Intelligence Scale –by Upinder dhar, Anukool Hyde & Sanjyot Pethe and Teaching Competency Scale constructed and standardized by the researchers was used to collect the data. Correlation and regression analysis were conducted on the data. The results of data analysis revealed that there was a strong positive relationship between EI and teaching competencies. Furthermore, it was found that among the eight Teaching competencies, the emotionally intelligent student teacher preferred to develop competencies related to learners, risk takers, collaborators, leader and adopter

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Shalini Yadav.(2014). The present study has been conducted on a sample of 200 senior secondary class male and female students of govt. and private schools of Rewari district. The data were collected with the help of Sheetala Prasad’s Emotional Intelligence Scale and R.K. Sarawat’s self concept questionnaire. By using Mean, S.D. and t values the result were analysed. The results indicate that govt. and private school students differ significantly in their emotional intelligence. But they do not differ significantly in their self concept

Suresh Aggarwal,&Vidhi Bhalla.(2014). In recent years, overall effectiveness of person is not only measured in terms of IQ, but emotional quotient, i.e. EQ also plays an equally important part. Parents seek to make the children emotionally intelligent so that they can utilize their emotions well, understand other’s emotions and learn the basic social skills to make a constructive contribution in the society. Children, who are creative, are believed to be socially more mature and exhibit greater emotional intelligence than other children. The present study is an attempt to find out whether emotional intelligence is a function of creativity or not. It is conducted on a sample of 150 senior secondary school students. The main findings of this study signify that there is a strong positive correlation between emotional intelligence and creativity. The findings of this study are beneficial for parents, teachers and educationists for nurturing the students to utilize their creative potential to become emotionally intelligent.

i. There exists significant interaction at different levels of emotional intelligence and spiritual intelligence on academic achievement of college students.
ii. There exists significant interaction at different levels of emotional intelligence and social intelligence on academic achievement of college students.
iii. There exists significant interaction at different levels of social intelligence and spiritual intelligence on academic achievement of college students.

Antony (2013) investigated the impact of EI on organizational commitment and OCB among employees working at FCI OEN Connectors, Cochin, Kerela. The findings prove a positive relationship between emotional intelligence, organizational commitment and organization commitment behavior. The study recommended that a moderate level of emotional intelligence is vital for better commitment towards one’s organization and to go an extra mile in performing one’s duties.

Asil, Doostar & Karimi (2013) confirmed a significant positive relationship between Job Involvement and organizational commitment with organizational citizenship behavior (OCB) in employees at Hajj and pilgrimage organization of East Azerbaijan province of Iran.

Javed & Farooqi (2013) examined the relationship of transformational leadership style to followers' perception of well-being on job satisfaction and the mediating role of perceived work characteristics was also studied for banking sector leaders and their subordinates in Gujrat, Pakistan. Significant positive influence of transformational leadership style of leaders was observed on perception of meaningful work and job involvement. Further, followers' perception of meaningful work was found to mediate the relationship between transformational leadership style and job satisfaction.

Judeh (2013) examined the effect of emotional intelligence on retention and the moderating role of job involvement among employees working in hotels and tourism corporations listed in Amman Stock Exchange in Jordan. The findings reveal that retention was related to emotional intelligence and job involvement acted as a moderator on the relationship between emotional intelligence and retention.

Lokanadha Reddy,G.&Vijaya Anuradha,R.(2013). This study examined the relationship between Emotional Intelligence (EI) and Occupational Stress (OS); Emotional Intelligence and Job Performance(JP); and Occupational Stress and Job Performance of teachers working at higher secondary level. Three Hundred and Twenty Seven higher secondary teachers from Vellore District in Tamil Nadu were chosen as sample, by using Simple Random Sampling Technique. The statistical techniques employed were percentage, Mean, SD, mean ± 1SD, and also correlations were computed to analyze the obtained data. The correlation studies revealed that there is a significant negative correlation between EI and OS; OS and JP; and positive relationship between EI and JP. These results reinforce the need to enhance and inculcate EI among higher secondary teacher to reduce their OS and further improve their JP. Possible strategies for this are: training in proactive supervision which emphasizes positive feedback, professional growth and development, open lines of communication, and strong levels of support, training in conflict resolution & team building and appropriate use of staff retreats.

Shilpa Agarwal.(2013). This paper intends to compare high and low emotional intelligent senior secondary school students with respect to their creativity. For this purpose, data of 400 adolescent students from senior secondary schools of Rohtak (Haryana) was collected and analysed by using appropriate statistical techniques viz. mean, Standard Deviation and 't' test. Verbal Test of Creative Thinking by Baquer Mehdi was used to measure the creativity and Mangal Emotional intelligence Inventory by S.K Mangal and Shubhra Mangal was used to measure emotional intelligence of the adolescents. Age of the subject was approximately 16 years. The obtained results showed that the high emotionally intelligent adolescents had obtained higher score on all the dimensions of creativity i.e. fluency, flexibility and originally as compared to their low emotionally intelligent counterparts.

Akintayo& Babalola (2012) undertook a research to describe the relationship between emotional intelligence and workers' behavior (in terms of job performance effectiveness, job satisfaction, and organizational commitment and job involvement) among workforce in industrial organizations in Nigeria. The findings revealed a positive association between emotional intelligence and all constructs of workers' behavior.

Bhatia, Deep & Sachdeva (2012) studied the relationship between job involvement and organizational effectiveness among employees at Punjab National Bank. The research inferred a direct relationship between job involvement and organizational effectiveness through employees' working style, approach towards the attainment of organizational goals, quality improvement, acquisition of new talent and skills etc.

Bii, Lucas, Mwengi et al. (2012) investigated the relationship between age and EI of managers and whether the relationship is moderated by gender and managerial experience in educational institutions including primary, secondary and tertiary institutions. They observed that age had a positive and significant influence on EI and moderating effects of gender and managerial experience were mild and non-significant.

Ghina (2012) examined the influence of corporate culture on organizational commitment of employees at civil Government organizations in Indonesia. Four dimensions of corporate culture were studied- team work, communication, reward & recognition and training & development. The results proved that the four dimensions were positively associated with on organizational commitment.

Ghorbani & Sani (2012) examined the influence of EI on OC of personnel in Salehieen finance and credit institute. The study concluded a positive and significant relationship between EI and OC of employees.

Ho, Oldenburg, Day & Sun (2012) studied job involvement as a mediator of the influence of work values on organizational commitment of 1047 Taiwanese nurses. The findings indicate that work values are positively related to job involvement and organizational commitment and job involvement is positively associated with organizational commitment. The study recommended enhancing organizational commitment through increased job involvement.

Islam et al. (2012) examined the relationship between job involvement and in role performance with three dimensional organizational commitment as a mediating factor. The study conducted in the educational sector in Pakistan yielded positive association between job involvement and in role performance where organizational commitment function as a perfect mediator enhancing this relationship with normative and affective components acting as mediating variables barring any role of continuance commitment dimension.

Kanchana & Panchanatham (2012) studied relationship between demographic variables like gender, age, job position, psychological variables like role clarity, job satisfaction and organizational commitment among employees in Tamil Nadu papers limited at Kagidapuram, Karur district. The analysis of a sample of 500 employees showed a significant relationship between demographic and psychological variables and organizational commitment. Also, the study purported that greater role clarity and high levels of job satisfaction result in greater commitment among employees. Job satisfaction was also found to influence components of organizational commitment.

Kelly (2012) suggested that since effective teaching is multi-faceted, students' evaluations of teaching are dependent on many factors which may not necessarily be directly related with teaching such as length of the course, class size, age & gender of instructor and even factors like student perceptions of what their final grade will be. The study concluded from review of past research that SET scores and student grades are positively related (Marsh & Roche, 2000; Olivares, 2001; Griffin, 2004). The study also highlighted the probability that the correlation between grades and SET scores may be attributed to student behavior reflected in their interest in the subject, motivation to work hard, give higher evaluations and earn better grades.

Kumar & Muniandy (2012) studied the EI of lecturers in a polytechnic in Malaysia and examined the impact of demographic factors like age, gender, occupational grade, work experience in the present as well as in the past job in industry. They concluded that age, experience, occupational grade and education had a significant positive influence on EI but gender and previous work experience had no impact on level of EI of lecturers.

Mir & Abbasi (2012) for academic leaders in higher education sector in Pakistan established that EI forms the core of transformational leadership behavior and all the components of EI are significantly related to transformational leadership. Self-awareness and motivation emerged the strongest predictors of transformational leadership.

Negoescu (2012) examined the influence of EI on OC and employee working behavior in highly competitive environment. The findings showed a positive impact of EI on OC and positive work behavior in highly challenging environment. The study supported the notion that emotionally intelligent individuals are capable of surmounting the difficulties posed by the competitive work environment.

Nikkheslat et al. (2012) explored the relationship between EI and OC and JS. In addition job satisfaction's role as a mediator between emotional intelligence and organizational commitment in a healthcare organization was studied. The results revealed a positive impact of emotional intelligence on organizational commitment and confirmed a positive mediating role of JS between EI and OC.

Nordin (2012) conducted a research to identify whether leadership behavior and EI influence augment OC among academic staff at a higher learning institution i.e. Universiti of Teknologi MARA (UiTM). The results support a positive but moderate correlation between EI, leadership behavior and OC. The statistics proved the strongest and exceptional contribution of transactional leadership to explain OC and confirmed EI and leadership behavior as the impending antecedents of OC.

Omoniyi & Adedapo (2012) examined the role of job involvement and organizational commitment as determinants of job performance in all thirty-three educational resource centers' employees servicing Oyo state government in Nigeria. The study revealed a significant relationship between job involvement and job performance but association between organizational commitment and job performance was found to be non-significant.

Sarboland (2012) studied the relationship between EI and OC of employees in the tax affairs offices in Ardebil province of Iran and proved a significant affiliation between EI dimensions (self-awareness, self-management, social awareness, and relationship management) and OC but the strength of association various dimensions of OC varied.

Sheikh, Newman & Azzeh (2012) examined the moderating role of individually held cultural values in the relationship between transformational leadership behavior of

Supervisors and job involvement of their followers in 10 organizations in UAE. Transformational leadership was found to have a positive and significant impact on job involvement of followers and cultural value orientations moderated the relationship.

Aghdasi, Kiamanesh & Ebrahim (2011) analyzed the direct effects of emotional intelligence on occupational stress, job satisfaction and organizational commitment on 234 employees in an Iranian organization. The results indicated the emotional intelligence did not have any direct or indirect effect on occupational stress, job satisfaction and organizational commitment.

Khalili (2011) investigated the correlation between EI and OC of 142 employees of small and medium enterprise in private sector in Iran. The findings show a significant relationship between overall EI and OC. The two EI competencies i.e. self-management and social awareness were found to have strong and positive influence on employee's obligation to the organization. Self-awareness and relationship management (the abilities of EI) exhibited positive but not significant impact on employees' OC.

Moradi & Ardahaey (2011) identified a significant role of EI in determining OC. Their study concluded that a high level of EI was associated with moderate level of OC which may be attributed to the effect of moderating variable(s) such as job satisfaction.

Mwangi, Mukulu and Kabare (2011) concluded that EI has a significant role in transformational leadership in a study conducted for Kenyan public universities. They found that eight out of fifteen EI skills (in Bar-On EQi) were related with transformational leadership behavior.

Ravichandran, Arasu & Kumar (2011) conducted a research in order to identify the relationship between emotional intelligence and work engagement behavior of IT and ITES employees. The results indicated a positive but weak association between overall emotional intelligence and overall work engagement behavior. A weak correlation wasattributed by the researchers to the reason that emotional intelligence is not the only factor in influencing the work engagement behavior of employees.

research findings ascertain organizational commitment as a consequence of job involvement with males more committed to their organizations and more involved in their jobs than females. However, no such relationship was found between job involvement and marital status, education level and tenure.

Ayiro (2009) examined the impact of EI of school principals and their performance among 100 principals. The schools were profiled on the basis of high or low performance. The study found a positive correlation between total EI scores and performance ratings and experiential EI was found to be the strongest predictor of performance.

Modassir & Singh (2008) investigated the relationship between EI and Transformational leadership of managers and Organizational Commitment Behavior (OCB) of followers in different industries in Goa and Daman. The study found no significant relationship between subordinates' perception of their leader as transformational and their OCB. EI was observed to be associated with conscientiousness and altruism. However, no significant link between EI and Transformational leadership was found.

Zafra, Retamero and Landa (2008) stated that emotionally intelligent individuals are likely to emerge as leaders in a group because their leadership style is largely transformational in nature. Further they cited that for effective leadership, EI and transformational leadership style go hand in hand i.e. one would be irrelevant without the other.

Bradberry & Su (2006) examined EI of leaders in order to identify the relationship between EI of leaders and their job performance. They used two measures of EI- one skill based i.e. Emotional Intelligence Appraisal (EIA) and other ability based i.e. MSCEIT. The study was conduct for 212 employees in three organizations- a homebuilder, a telecom company and an irrigation systems manufacturing company. The findings indicated that scores on EIA and MSCEIT were positively but not significantly related with each other. Leader EI scores on MSCEIT did not exhibit a significant relationship with their job performance whereas EI scores on EIA were found to have strong association with performance. Relationship management dimension of EI emerged a stronger predictor of leader job performance than other components and social awareness was the only EI skill that did not have any association with performance of leaders.

Kerr et al. (2006) studied relationship between EI of managers and their leadership effectiveness measured through subordinate ratings. Employing MSCEIT for measuring EI, the study found that half of the MSCEIT scores strongly predicted leadership effectiveness especially the branches in experiential EI domain but relationship between reasoning EI domain and subordinate ratings was insignificant.

Haskett & Bean (2005) studied the relationship between EI Competencies and the Seven Principles for Good practice in Undergraduate Education (Chickening & Gramson, 1987). The study was conducted among two categories of teachers in same university- 86 teachers who had been awarded for excellence in teaching and 200 faculty members who had not been awarded. The study found that not all but some EI competencies were positively and directly related to the principles i.e. interpersonal skills, adaptability. They recommended that EI can play an important role in improving teaching.

Hayward (2005) examined the relationship between employee performance, leadership and EI in a South African parastatal. The results varied according to two different statistical techniques employed. With linear regression analysis, a significant relationship between employee performance and emotionally intelligent and transactional leader emerged but no significant relationship between EI and emotionally intelligent transformational leader was concluded. Simple correlation analysis revealed a weak linear relationship between EI and transactional leadership and a strong relationship between EI and Transformational leadership.

Abraham (2004) put forth five propositions based on the relationship between emotional intelligence competencies (self-control, resilience, social skills, conscientiousness, reliability, integrity and motivation) and performance on the job. These propositions are based on the notion that weak relationship between EI and performance reported in the past literature is because it is some of the competencies rather than the overall EQ that predict performance.

Barchard (2003) studied the role of EI in academic success (measured through grades achieved) of undergraduate psychology students. The study found that EI does not predict academic success and although a measure of emotional understanding was found to be related with academic success but this relationship lost ground when relevant cognitive abilities and personality characteristics were considered.

Meyer et al. (2002) conducted a meta-analysis in order to identify relationship among three dimensions of organizational commitment and relationship between affective, continuance and normative commitment and variables classified as antecedents, correlates and consequences in Meyer & Allen's (1990) model. The results indicate that the three forms of commitment are related but distinguishable from one another as well as from the correlates i.e. job satisfaction, job involvement and occupational commitment. Demographic variables were found to have a minor role in the development of organizational commitment but work experiences showed a strong relationship especially with affective commitment. Perceived organizational support exhibited the strongest positive correlation with affective commitment and a strong correlation was found between affective commitment and various forms of organizational justice (distributive, procedural and interactional) and transformational leadership. Finally, affective commitment showed the strongest positive correlation with desirable work behavior followed by normative commitment. Continuance commitment was found to be unrelated with desirable work behavior.

Sherlock (2002) reviewed the literature and suggested the incorporation of EI into the curriculum of international education. Based on Goleman's notion that EI can be taught and arguments and researches supporting the need for both intellectual and emotional development of students through education, the study recommended that values like open-mindedness, inclusion, respect and tolerance can be developed by propagating the development of EI in students.

Sivanathan & Fekken (2002) assessed the relationship of emotional intelligence and moral reasoning of university residence staff (as leaders) with their leadership style and effectiveness. It was found that emotionally intelligent leader were considered to be transformational in their leadership style by their subordinates and they were also more effective. However, moral reasoning was related with effectiveness rather than EI.

George (2000) explained the role of EI through description of four aspects of Mayer & Salovey's model (1990)in effective leadership. The four components of EI i.e. the appraisal & expression of emotion, use of emotion to enhance cognitive processes & decision making, knowledge about emotions and management of emotions and five essential elements of effective leadership i.e. development of collective goals & objectives; instilling in others an appreciation of the importance of work activities; generating and maintaining enthusiasm; confidence, optimism cooperation and trust; encouraging flexibility in decision.

CONCLUSION

The review of research studies related Emotional Intelligence of higher secondary students, teacher, adolescent, adult and children from India and abroad shows important role of Emotional Intelligence. Till there exists gap in research related to factors of Emotional Intelligence.

Chapter III

Methodology

CHAPTER III

METHODOLOGY

INTRODUCTION:

Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study's overall validity and reliability. Research may be very broadly defined as systematic gathering of data and information and its analysis for advancement of knowledge in any subject. Research methodology is the path through which researchers need to conduct their research. For emphasis, in this chapter, the author outlines the research strategy, research design, research methodology, the study area, data sources such as primary data sources and secondary data, population consideration and sample size determination such as questionnaires sample size determination and workplace site exposure measurement sample determination, data collection methods like primary data collection methods including workplace site observation data collection and data collection through desk review, data collection through questionnaires, data obtained from experts opinion, workplace site exposure measurement, data collection tools pretest, secondary data collection methods, methods of data analysis used such as quantitative data analysis and qualitative data analysis, data analysis software, the reliability and validity analysis of the quantitative data, reliability of data, reliability analysis, validity, data quality management, inclusion criteria, ethical consideration and dissemination of result and its utilization approaches. In order to satisfy the objectives of the study, a qualitative and quantitative research method is apprehended in general.

DESIGN OF THE STUDY:

A research design is highly essential and it is inevilable as a blueprint in the present investigation Descriptive research design and survey analysis followed.

LOCATION OF THE STUDY:

The present investigation was conducted in the higher secondary school students of 114 female students and 138 male students in Cuddalore district.

RESEARCH METHOD:

Normative survey is used in the present study. It seeks to obtain precise information concerning the current status phenomena and to draw valid general conclusions from the discovered. This study is not restricted only to fact findings but in the formulation of important principal knowledge and solution of significant problem related to the Emotional intelligence of higher secondary school students and other significant variables related to it.

SAMPLE OF THE SCHOOL:

Students from self-financing, aided and government schools were chosen for sample collection. The respondents were randomly selected from each school.

DISTRIBUTION OF THE SAMPLE:

The random sampling method was used to select the samples. The sample wes divided into different categories on the basis of the school type, age, gender, medium, father's qualification, mother's qualification, father's occupation, mother's occupation, no. of family members, type of family.

Table – 3.1

LISTS OF SCHOOLS INVOLVED IN THE STUDY			
S.NO	**SCHOOL NAME**	**PLACE**	**NO. OF RESPONDENTS**
1	Government Higher Secondary School	Thiruvandhipuram	128
2	Sri Lakshmi Chordia Matric Higher Secondary School	Cuddalore	65
3	Sri Padaleswarar Higher Secondary School	Cuddalore	59
		Total	**252**

POPULATION SIZE:

In cuddalore district there are 29,900 Higher secondary school students are enrolled. The samples were selected randomly from higher secondary school. So, 0.84% was tested for the problem of the study.

VARIABLES SELECTED FOR THE STUDY:

For the present investigation the investigator selected the following variables**.**

Research Variables:

Emotional Intelligence

Demographic Varibles:

1. Type of school
2. Locality
3. Age
4. Gender
5. Medium
6. Father's Qualification
7. Mother's Qualification
8. Father's Occupation
9. Mother's Occupation
10. No. of family members
11. Type of family

Table 3.2

THE DETAILED DISTRIBUTION OF THE SAMPLES:

S.No	Variables		N	Percentage
1.	**Type of school**	**Government**	**127**	**50.4**
		Self-financing	**66**	**26.2**
		Aided	**59**	**23.4**
2.	**Locality**	**Rural**	**147**	**58.3**
		Urban	**105**	**41.7**
3.	**Age**	**15**	**43**	**17.1**
		16	**127**	**50.4**
		17	**79**	**31.3**

		18	**3**	**1.2**
4.	**Gender**	**Male**	**138**	**54.8**
		Female	**114**	**45.2**
5.	**Medium**	**English**	**93**	**36.9**
		Tamil	**159**	**63.1**
6.	**Father's Qualification**	**Illiterate**	**57**	**22.6**
		Literate	**173**	**68.7**
		Graduate	**22**	**8.7**
7.	**Mother's Qualification**	**Illiterate**	**72**	**28.6**
		Literate	**156**	**61.9**
		Graduate	**24**	**9.5**
8.	**Father's Occupation**	**Government**	**15**	**5.9**
		Private	**37**	**14.7**
		Agriculture	**42**	**16.7**
		Coolie	**125**	**49.6**
		Business	**33**	**13.1**
9.	**Mother's Occupation**	**Homemaker**	**140**	**55.6**
		Government	**19**	**7.5**
		Private	**15**	**5.9**
		Agriculture	**11**	**4.4**
		Coolie	**66**	**26.2**
		Business	**1**	**0.4**
10.	**Family members**	**3**	**22**	**8.7**
		4	**99**	**39.3**

		5	**70**	**27.8**
		6	**35**	**13.9**
		7	**14**	**5.5**
		8	**5**	**2.0**
		9	**3**	**1.2**
		0	**3**	**1.2**
		15	**1**	**0.4**
11.	**Type of family**	**Joint family**	**72**	**28.6**
		Neutral family	**180**	**71.4**

TOOLS USED:

Emotional Intelligence Scale constructed and validated by Anukool Hyde, Upinder Dhar & Sanjyot pethe (2001) have been used in this study.

DESCRIPTION OF THE TOOLS USED:

Emotional Intelligence Scale is constructed and validated by Anukool Hyde, Upinder Dhar & Sanjyot pethe (2001). This scale consists of 34 statements, which are related to human emotions in our daily lives. Each statement has the range of five responses. They are Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree. The respondents are requested to put a tick mark in the relevant column against each statement. A copy of Emotional intelligence scale is enclosed in appendix.

FACTORS OF EMOTIONAL INTELLIGENCE:

As shown in table no 3.3 Emotional intelligence scale consists of 10 factors namely **Empathy, Self awareness, Self-motivation, Emotional stability, Managing relations, Integrity, Self-development, Value orientation, Commitment and Altruistic behaviour.**

Table 3.3

FACTORS OF EMOTIONAL INTELLIGENCE AND THEIR ITEM NUMBER		
S.No	**Factors of Emotional Intelligence**	**Item No.**
1.	**Empathy**	**9, 10, 15, 20, 25**
2.	**Self-awareness**	**6, 12, 18, 29**
3.	**Self-motivation**	**2, 4, 7, 8, 31, 34**
4.	**Emotional stability**	**14, 19, 26, 28**
5.	**Managing relations**	**1, 5, 11, 17**
6.	**Integrity**	**16, 27, 32**
7.	**Self-development**	**30, 33**
8.	**Value orientation**	**21, 22**
9.	**Commitment**	**23, 24**
10.	**Altruistic behaviour**	**3, 13**

STATISTICAL TECHNIQUES USED:

The following statistical techniques were used for analysis and interpretation of data.

Descriptive analysis

1. Measure of central tendency (Mean)
2. Measure of variability (Standard Deviation)

Inferential analysis

1. ‘t’ test
2. ‘F’ test

Multiple correlation and regression anslysis.

CONCLUSION:

To find out the Emotional intelligence of students, Emotional intelligence scale (Constructed and Validated by Anukool Hyde, Upinder dhar & Sanjyot pethe 2001) were administered to a sample of 252 students in Cuddalore district. The score were subjected to statistical treatments, which are described in the succeeding chapter IV.

Chapter IV

Analysis and Interpretation

CHAPTER IV

ANALYSIS INTERPRETATION

INTRODUCTION

The statistical analysis of the data has been presented in this chapter. The data collected from 252 school teachers in Cuddalore district (Tamilnadu) have been analyzed as follows to arrive at meaningful conclusions.

- Descriptive Analysis (Mean and Standard Deviation),
- Inferrential Analysis (t-test and f-test)
- Multiple Correlation Analysis
- Regression

LEVEL OF SIGNIFICANCE

The level of significance for rejection or acceptance of the hypothesis has to be decided in advance. In reporting the findings of the study, the researcher should indicate the actual probability level associated with the findings so that the researcher may use own judgement in deciding whether the null hypothesis should be rejected or accepted in the present study 0.05 level of significant has been taken into account.

DESCRIPTIVE ANALYSIS

One of the important objectives of the study is to assess the level of Emotional Intelligence of the higher secondary school students. For that, the investigator used Emotional Intelligence Scale constructed and validated by Anukool Hyde, Upinder Dhar & Sanjyot pethe (2001). The test consists of 34 questions. The maximum score is 136.

For that higher secondary school students were divided into Very Low, Low, Moderate, High and Very high level of Emotional Intelligence category. In order to divide the sample into above stated categories Investigator adopted the following method. The categorization was done by dividing the baseline normal curve into 5 units, each unit being

ANALYSIS OF THE LEVEL OF EMOTIONAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS

One of the important objectives of the present study is to assess the level of emotional intelligence of Higher Secondary School Students . For that, the investigator used emotional intelligence scale constructed and validated by Hyde et al (2002). The test consists of 34 questions. The maximum score for this test is 170. For that the Higher Secondary School Students were divided into good, average and low levels of emotional intelligence categories. In order to divide the sample into the above stated categories investigator adopted the following method. This categorization was done by dividing the base line of normal curve into three units, each unit being good-103-150, average-69-102 and low below 68.

Table No 4.1

Percentage Analysis of Emotional intelligence Score of the Total Sample

Variable	Category	N	Percentage
Entire Emotional Intelligence	Low	106	42
	Average	131	52
	Good	15	6
Total		252	100

From the Table 4.1 it is clear that there is only 6 percentage of Higher Secondary School Students have good level of emotional intelligence, 52 percentage of Higher Secondary School Students have average level of emotional intelligence and 42 percentage of Higher Secondary School Students have low level of emotional intelligence.

ANALYSIS OF THE LEVEL OF EMOTIONAL INTELLIGENCE OF ENTIRE AND SUBSAMPLES

One of the important objectives of the study is to assess the level of Emotional Intelligence of the higher secondary school students not for the entire sample but also subsample wise. For that the mean Standard deviation values have been calculated for entire and subsamples which include school type, age, gender, medium, father's qualification, mother's qualification, father's occupation, mother's occupation, no. of family members, type of family

Table 4.2

Mean and standard deviation of Emotional intelligence of Total sample			
Variable	Mean	N	SD
Emotional intelligence	73.8730	252	17.08170

The above table 4.2 shows the mean score and standard deviation of Emotional Intelligence of Higher Secondary school students. It is found to be 73.87 and 17.08 respectively and concluded that the **higher secondary school students Emotional Intelligence is Average.**

TABLE 4.3

DESCRIPTIVE ANALYSIS OF THE TOTAL EMOTIONAL INTELLIGENCE

S.No	Variables		N	Percentage	Mean	SD
1.	Type of school	Government	127	50.4	71.44	18.90
		Self-financing	66	26.2	76.95	12.78
		Aided	59	23.4	75.64	16.62
2.	Locality	Rural	147	58.3	72.06	18.61
		Urban	105	41.7	76.40	14.38
3.	Age	15	43	17.1	71.46	12.74
		16	127	50.4	74.32	17.93
		17	79	31.3	74.67	17.63
		18	3	1.2	68.33	24.54
4.	Gender	Male	138	54.8	78.16	17.17
		Female	114	45.2	68.67	15.51
5.	Medium	English	93	36.9	73.47	13.05
		Tamil	159	63.1	74.10	19.08
6.	Father's Qualification	Illiterate	57	22.6	69.70	16.19
		Literate	173	68.7	74.83	17.06
		Graduate	22	8.7	77.09	18.39
7.	Mother's Qualification	Illiterate	72	28.6	72.54	15.29
		Literate	156	61.9	73.81	17.79
		Graduate	24	9.5	78.25	17.38

8.	**Father's Occupation**	**Government**	**15**	**5.9**	76.53	17.59
		Private	**37**	**14.7**	78.81	14.24
		Agriculture	**42**	**16.7**	81.09	14.57
		Coolie	**125**	**49.6**	68.41	17.46
		Business	**33**	**13.1**	78.60	15.21
9.	**Mother's Occupation**	**Homemaker**	**140**	**55.6**	73.64	15.39
		Government	**19**	**7.5**	84.52	14.31
		Private	**15**	**5.9**	74.93	15.07
		Agriculture	**11**	**4.4**	87.36	12.33
		Coolie	**66**	**26.2**	68.81	20.02
		Business	**1**	**0.4**	73.00	
10.	**Family members**	**3**	**22**	**8.7**	71.5000	16.62
		4	**99**	**39.3**	72.03	16.10
		5	**70**	**27.8**	74.65	16.54
		6	**35**	**13.9**	74.48	20.43
		7	**14**	**5.5**	80.42	20.41
		8	**5**	**2.0**	81.00	8.30
		9	**3**	**1.2**	90.00	8.88
		10	**3**	**1.2**	76.33	8.8
		15	**1**	**0.4**	49.00	
11.	**Type of family**	**Joint family**	**72**	**28.6**	75.62	18.79
		Neutral family	**180**	**71.4**	73.17	16.34

The above table 4.3 exhibits the whole details about emotional intelligence among the higher secondary school students, its mean and standard deviation for the demographic Variables such as, type of school, locality, age, gender, medium, father's qualification, Mother's qualification, father's occupation, mother's occupation, family members, type of family.

It is inferred from the above table that, 50.4 percent respondents are studying in Government schools , 26.2 percent of the respondents are studying in self-financing schools and 23.4 respondents are studying in aided schools. The mean and standard deviation for the Government school students are 71.4 and 18.9 respectively. The mean and standard deviation for the self-financing school students are 76.9 and 12.7 respectively. The mean and standard deviation for the aided school students are 75.6 and 16.6 respectively. **The Self financing school students' Emotional intelligence is more than the Government and aided school students.**

It is inferred from the above table that, 58.3 percent of the respondents are living in rural area and 41.7 percent of the respondents are living in urban area. The mean and standard deviation for the rural school students are 76.4 and 14.3 respectively. The mean and standard deviation for the rural school students are 72 and 18.6 respectively. **The rural school students' Emotional intelligence is more than the urban students.**

It is inferred from the above table that, 17.1 percent of the respondents age are from 15 years, 50.4 percent of the respondents age are from 16 years, 31.3 percent of the respondents age are from 17 years, 1.2 percent of the respondents age are from 18 years. The mean and standard deviation for 15 years is 71.4 and 12.7 respectively for 16 years are 74.3 and 17.9 respectively for 17 years 74.6 and 17.6 respectively for 18 years 68.3

and 24.5 respectively. **The school students with 17 years of age high level of emotional intelligence than others.**

It is inferred from the above table that, 54.8 percent of the respondents are male 45.2 percent of the respondents are female school students. The mean and deviation of male students are 78.1 and 17.1 respectively. The mean and deviation of female students are 68.6 and 15.5 respectively. **The male school students' Emotional intelligence is more than the female students.**

It is inferred from the above table that, 36.9 percent of the respondents are English medium 63.1 percent of the respondents are Tamil medium. The mean and deviation of English medium students 73.4 and 13.05 respectively. The mean and deviation of Tamil medium students 74.1 and 19 respectively. **The Tamil medium school students' Emotional intelligence is more than the English medium students.**

It is inferred from the above table that, 22.6 percent of the respondents are Illiterate 68.7 percent of the respondents are literate 8.7 percent of the respondents are graduate. The mean and deviation of Illiterate 69.7 and 16.1 respectively. The mean and deviation of literate 74.8 and 17 respectively. The mean and deviation of graduate 77 and 18.3 respectively **The graduate father students' Emotional intelligence is more than others.**

It is inferred from the above table that, 28.6 percent of the respondents are Illiterate 61.7 percent of the respondents are literate 9.5 percent of the respondents are graduate. The mean and deviation of Illiterate 72.5 and 15.2 respectively. The mean and deviation of literate 73.8 and 17.7 respectively. The mean and deviation of graduate 78.2 and 17.3 respectively **The graduate mother students' Emotional intelligence is more than others.**

It is inferred from the above table that, 5.9 percent of the respondents fathers are Government employee 14.7 percent of the respondents fathers are private employee 16.7 percent of the respondents fathers' are agriculture 49.6 percent of the respondents fathers' are coolie 13.1 percent of the respondents fathers' are business man. The mean and deviation of Illiterate 72.5 and 15.2 respectively. The mean and deviation Government employee of 76.5 and 17.5 respectively. The mean and deviation of private employee 78.8 and 14.2 respectively. The mean and deviation Government employee of 76.5 and 17.5 respectively. The mean and deviation Government employee of 76.5 and 17.5 respectively. The mean and deviation Government employee of 76.5 and 17.5 respectively. **The graduate mother students' Emotional intelligence is more than others.**

It is inferred from the above table that, 28.6 percent of the respondents are Illiterate 61.7 percent of the respondents are literate 9.5 percent of the respondents are graduate. The mean and deviation of Illiterate 72.5 and 15.2 respectively. The mean and deviation of literate 73.8 and 17.7 respectively. The mean and deviation of graduate 78.2 and 17.3 respectively **The graduate mother students' Emotional intelligence is more than others.**

DIFFERENTIAL ANALYSIS OF EMOTIONAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS:

In order to find out the significant mean difference among the higher secondary school students emotional intelligence and their subsamples the test of significance (t-test and F test) was used for different subsamples based on their nature. It also be recalled that the Null hypotheses there is no significant relationship between the selected pairs of subsamples of higher secondary school students in respect of their Emotional Intelligence was framed and given in chapter -1. The results were given below.

Table: 4.4

t- TEST SHOWING RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE, ITS DIMENSIONS AND GENDER

	Gender	N	Mean	Std. Deviation	t-value	Result at 5% level of significance
Empathy	male	138	12.06	3.35	2.714	NS
	female	114	10.92	3.37		
Self-awareness	male	138	8.79	2.95	2.925	S
	female	114	7.72	2.80		
Self-motivation	male	138	13.79	3.88	5.074	S
	female	114	11.40	3.52		
Emotional stability	male	138	9.33	2.99	2.520	NS
	female	114	8.41	2.75		
Managing relations	male	138	9.12	2.73	2.127	NS
	female	114	8.42	2.44		
Integrity	male	138	6.92	2.32	3.685	S
	female	114	5.85	2.25		
Self-development	male	138	4.87	1.89	5.137	S
	female	114	3.71	1.66		
Value orientation	male	138	4.90	1.69	1.528	NS
	female	114	4.55	1.96		
Commitment	male	138	3.99	1.74	2.237	NS
	female	114	3.53	1.44		
Altruistic behaviour	male	138	4.35	1.62	.951	NS

	female	114	4.14	1.96		
Total EI	male	138	78.16	17.17	4.560	S
	female	114	68.67	15.51		

The above table 4.4 exhibits the details of mean, Standard Deviation, and t-value relationship between Emotional Intelligence, its Dimensions and Gender.

It is inferred from the obtained t-value there is no significant difference in male and female student's Empathy. Since the calculated t-value (2.714) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the male and female respondent do not differ in their Empathy.**

It is inferred from the obtained t-value there is significant difference in male and female student's Selfawareness. Since the calculated t-value (2.925) is significant at 5% level. So the null hypothesis is rejected and alternate hypothesis is accepted. **Therefore it is concluded that the male and female respondent do not differ in their Selfawareness.**

It is inferred from the obtained t-value there is significant difference in male and female student's Self motivation. Since the calculated t-value (5.074) is no significant at 5% level. So the null hypothesis is rejected and alternate hypothesis is accepted. **Therefore it is concluded that the male and female respondent do not differ in their Self motivation..**

It is inferred from the obtained t-value there is no significant difference in male and female student's Emotional stability. Since the calculated t-value (2.520) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the male and female respondent do not differ in their Emotional stability.**

It is inferred from the obtained t-value there is no significant difference in male and female student's managing relations. Since the calculated t-value (2.127) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the male and female respondent do not differ in their managing relations.**

It is inferred from the obtained t-value there is significant difference in male and female student's Integrity.. Since the calculated t-value (3.685) is no significant at 5% level. So the null hypothesis is rejected and alternate hypothesis is accepted. **Therefore it is concluded that the male and female respondent do not differ in their Integrity.**

It is inferred from the obtained t-value there is significant difference in male and female student's Self development. Since the calculated t-value (5.137) is no significant at 5% level. So the null hypothesis is rejected and alternate hypothesis is accepted. **Therefore it is concluded that the male and female respondent do not differ in their Self development.**

It is inferred from the obtained t-value there is no significant difference in male and female student's Value orientation. Since the calculated t-value (1.528) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the male and female respondent do not differ in their Value orientation.**

It is inferred from the obtained t-value there is no significant difference in male and female student's Commitment. Since the calculated t-value (2.237) is no significant at 5%

level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the male and female respondent do not differ in their Commitment.**

It is inferred from the obtained t-value there is no significant difference in male and female student's Altruistic behaviour. Since the calculated t-value (.951) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the male and female respondent do not differ in their Altruistic behaviour.**

Table: 4.5

t- TEST SHOWING RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE, ITS

DIMENSIONS AND LOCALITY

	MEDIUM	N	Mean	Std. Deviation	t-value	Result at 5% level of significance
Empathy	english	93	12.26	3.19	2.706	NS
	tamil	159	11.16	3.40		
Self-awareness	english	93	7.85	2.61	-1.751	NS
	tamil	159	8.57	3.08		
Self-motivation	english	93	12.33	2.90	-1.201	NS
	tamil	159	12.91	4.38		
Emotional stability	english	93	8.61	2.54	-1.265	NS
	tamil	159	9.09	3.10		

Managing relations	english	93	8.83	2.27	.153	NS
	tamil	159	8.78	2.82		
Integrity	english	93	6.43	2.09	-.033	NS
	tamil	159	6.44	2.49		
Self-development	english	93	4.64	1.88	1.919	NS
	tamil	159	4.17	1.86		
Value orientation	english	93	4.73	1.65	-.098	NS
	tamil	159	4.75	1.93		
Commitment	english	93	3.70	1.34	-.566	NS
	tamil	159	3.83	1.77		
Altruistic behaviour	english	93	3.95	1.53	-2.176	NS
	tamil	159	4.43	1.89		
Total EI	english	93	73.47	13.05	-.312	NS
	tamil	159	74.10	19.08		

The above table 4.5 exhibits the details of mean, S.D, and t-value relationship between Emotional Intelligence, its Dimensions and medium.

It is inferred from the obtained t-value there is no significant difference in english and tamil medium student's Empathy. Since the calculated t-value (2.706) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English and tamil respondent do not differ in their Empathy.**

It is inferred from the obtained t-value there is no significant difference in english and tamil medium student's Self awareness. Since the calculated t-value (-1.751) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English and tamil respondent do not differ in their Selfawareness.**

It is inferred from the obtained t-value there is no significant difference in english and tamil medium student's Self motivation. Since the calculated t-value (-1.201) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English and tamil respondent do not differ in their Self motivation.**

It is inferred from the obtained t-value there is no significant difference in english and tamil medium student's Emotional stability. Since the calculated t-value (-1.265) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English and tamil respondent do not differ in their Emotional stability.**

It is inferred from the obtained t-value there is no significant difference in english and tamil medium student's managing relations. Since the calculated t-value (.153) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English and tamil respondent do not differ in their Managing relations.**

It is inferred from the obtained t-value there is no significant difference in english and tamil medium student's Integrity. Since the calculated t-value (-.033) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English and tamil respondent do not differ in their Integrity.**

It is inferred from the obtained t-value there is no significant difference in english and tamil medium student's Self development. Since the calculated t-value (1.919) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English and tamil respondent do not differ in their Self development.**

It is inferred from the obtained t-value there is no significant difference in english and tamil medium student's Value orientation. Since the calculated t-value (-.098) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English and tamil respondent do not differ in their Value orientation.**

It is inferred from the obtained t-value there is no significant difference in english and tamil medium student's Commitment. Since the calculated t-value (-.566) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English and tamil respondent do not differ in their Commitment.**

It is inferred from the obtained t-value there is no significant difference in english and tamil medium student's Altruistic behaviour. Since the calculated t-value (-2.176) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English and tamil respondent do not differ in their Altruistic behaviour.**

It is inferred from the obtained t-value there is no significant difference in english and tamil medium student's Total EI. Since the calculated t-value (-.312) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the English and tamil respondent do not differ in their Total EI.**

Table: 4.6

t- TEST SHOWING RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE, ITS DIMENSIONS AND FAMILY TYPE

	FAMILY TYPE	N	Mean	Std. Deviation	t-value	Result at 5% level of significance
Empathy	joint	72	12.11	3.45	1.683	NS
	neutral	180	11.32	3.32		
Self-awareness	joint	72	8.26	2.73	-.170	NS
	neutral	180	8.33	3.01		
Self-motivation	joint	72	13.19	4.21	1.235	NS
	neutral	180	12.52	3.77		
Emotional stability	joint	72	9.04	2.77	.429	NS
	neutral	180	8.86	2.98		
Managing relations	joint	72	8.50	2.73	-1.169	NS
	neutral	180	8.92	2.58		
Integrity	joint	72	6.90	2.65	2.004	NS
	neutral	180	6.25	2.19		
Self-development	joint	72	4.48	2.06	.730	NS
	neutral	180	4.29	1.80		
Value orientation	joint	72	4.80	1.66	.326	NS

	neutral	180	4.72	1.89		
Commitment	joint	72	3.72	1.78	-.391	NS
	neutral	180	3.81	1.56		
Altruistic behaviour	joint	72	4.59	2.02	1.766	S
	neutral	180	4.12	1.66		
Total EI	joint	72	75.62	18.79	1.030	NS
	neutral	180	73.17	16.34		

The above table 4.6 exhibits the details of mean, S.D, and t-value relationship between Emotional Intelligence, its Dimensions and family type.

It is inferred from the obtained t-value there is no significant difference in joint and neutral family student's Empathy. Since the calculated t-value (1.683) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the joint and neutral family respondent do not differ in their Empathy.**

It is inferred from the obtained t-value there is no significant difference in joint and neutral family student's Self awareness. Since the calculated t-value (-.170) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the joint and neutral family respondent do not differ in their Self awareness.**

It is inferred from the obtained t-value there is no significant difference in joint and neutral family student's Self motivation. Since the calculated t-value (1.235) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the joint and neutral family respondent do not differ in their Self motivation.**

It is inferred from the obtained t-value there is no significant difference in joint and neutral family student's Emotional stability. Since the calculated t-value (.429) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the joint and neutral family respondent do not differ in their Emotional stability**.

It is inferred from the obtained t-value there is no significant difference in joint and neutral family student's Managing relations. Since the calculated t-value (-1.169) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the joint and neutral family respondent do not differ in their Managing relations.**

It is inferred from the obtained t-value there is no significant difference in joint and neutral family student's Integrity. Since the calculated t-value (2.004) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the joint and neutral family respondent do not differ in their Integrity.**

It is inferred from the obtained t-value there is no significant difference in joint and neutral family student's Self development. Since the calculated t-value (.730) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the joint and neutral family respondent do not differ in their Self development.**

It is inferred from the obtained t-value there is no significant difference in joint and neutral family student's Value orientation. Since the calculated t-value (.326) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the joint and neutral family respondent do not differ in their Value orientation**.

It is inferred from the obtained t-value there is no significant difference in joint and neutral family student's Commitment. Since the calculated t-value (-.391) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the joint and neutral family respondent do not differ in their Commitment.**

It is inferred from the obtained t-value there is no significant difference in joint and neutral family student's Altruistic behaviour. Since the calculated t-value (1.766) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the joint and neutral family respondent do not differ in their Altruistic behaviour.**

It is inferred from the obtained t-value there is no significant difference in joint and neutral family student's Total EI. Since the calculated t-value (1.030) is no significant at 5% level. So the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore it is concluded that the joint and neutral family respondent do not differ in their Total EI.**

Table – 4.7

SIGNIFICANT DIFFERENCE AMONG EMOTIONAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR SCHOOL TYPE

		Sum of squares	df	Mean squares	'F' value	Result at 5% level of significance
Empathy	Between Groups	254.7	2	127.3	12.188	S
	Within Groups	2601.7	249	10.4		
	Total	2856.4	251			
Self-awareness	Between Groups	41.5	2	20.7	2.449	NS
	Within Groups	2114.6	249	8.4		
	Total	2156.2	251			
Self-motivation	Between Groups	63	2	31.5	2.084	NS
	Within Groups	3768.3	249	15.1		
	Total	3831.4	251			
Emotional stability	Between Groups	8.5	2	4.2	.502	NS
	Within	2128.6	249	8.5		

	Groups					
	Total	2137.2	251			
Managing relations	Between Groups	6.9	2	3.4	.499	NS
	Within Groups	1724.5	249	6.9		
	Total	1731.4	251			
Integrity	Between Groups	9.9	2	4.961	.898	NS
	Within Groups	1376.0	249	5.5		
	Total	1385.9	251			
Self-development	Between Groups	54.8	2	27.4	8.192	S
	Within Groups	834.3	249	3.3		
	Total	889.2	251			
Value orientation	Between Groups	4.5	2	2.2	.680	NS
	Within Groups	837.1	249	3.3		
	Total	841.7	251			
Commitment	Between Groups	2.8	2	1.4	.542	NS

	Within Groups	663.5	249	2.6		
	Total	666.4	251			
Altruistic behaviour	Between Groups	2.5	2	1.2	.398	NS
	Within Groups	795.6	249	3.1		
	Total	798.2	251			
Total EI	Between Groups	1558.13	2	779	2.706	NS
	Within Groups	71679.8	249	287.8		
	Total	73237.9	251			

In order to find out whether there is any significant difference among students emotional intelligence in respect of their school type.

It is inferred from obtained f value that there is significant difference in school type in their Empathy. Since calculated f-value (12.188) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different school type do not differ in their Empathy.**

It is inferred from obtained f value there is no significant difference school type in their Self awareness. Since calculated f-value (2.449) which is non significant at 5% level.

So null hypothesis is accepted. **Therefore the students with different school type do not differ in their Self awareness.**

It is inferred from obtained f value there is no significant difference school type in their Self motivation. Since calculated f-value (2.084) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different school type do not differ in their Self motivation.**

It is inferred from obtained f value there is no significant difference school type in their Emotional stability. Since calculated f-value (.502) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different school type do not differ in their Emotional stability.**

It is inferred from obtained f value there is no significant difference school type in their Managing relations. Since calculated f-value (.499) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different school type do not differ in their Managing relations.**

It is inferred from obtained f value there is no significant difference school type in their Integration. Since calculated f-value (.898) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different school type do not differ in their Integration.**

It is inferred from obtained f value there is significant difference school type in their Self development. Since calculated f-value (8.192) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different school type do not differ in their Self development.**

It is inferred from obtained f value there is no significant difference school type in their Value orientation. Since calculated f-value (.680) which is non significant at 5%

level. So null hypothesis is accepted. **Therefore the students with different school type do not differ in their Value orientation.**

It is inferred from obtained f value there is no significant difference school type in their Commitment. Since calculated f-value (.542) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different school type do not differ in their Commitment.**

It is inferred from obtained f value there is no significant difference school type in their Altruistic behaviour. Since calculated f-value (.398) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different school type do not differ in their Altruistic behaviour.**

It is inferred from obtained f value there is no significant difference school type in their Total EI. Since calculated f-value (2.706) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different school type do not differ in their Total EI.**

Table – 4.8

SIGNIFICANT DIFFERENCE AMONG EMOTIONAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR AGE

		Sum of squares	df	Mean squares	'F' value	Result at 5% level of significance
Empathy	Between Groups	30.3	3	10.1	.887	NS
	Within	2826.1	248	11.3		

	Groups					
	Total	2856.4	251			
Self-awareness	Between Groups	6.7	3	2.2	.260	NS
	Within Groups	2149.4	248	8.6		
	Total	2156.2	251			
Self-motivation	Between Groups	17.5	3	5.8	.381	NS
	Within Groups	3813.8	248	15.3		
	Total	3831.4	251			
Emotional stability	Between Groups	36.1	3	12.0	1.422	NS
	Within Groups	2101.1	248	8.4		
	Total	2137.2	251			
Managing relations	Between Groups	8.9	3	2.9	.432	NS
	Within Groups	1722.4	248	6.9		
	Total	1731.4	251			
Integrity	Between Groups	3.4	3	1.1	.204	NS

	Within Groups	1382.579	248	5.5		
	Total	1385.9	251			
Self-development	Between Groups	11.1	3	3.7	1.053	NS
	Within Groups	878.0	248	3.5		
	Total	889.2	251			
Value orientation	Between Groups	4.5	3	1.5	.448	NS
	Within Groups	837.2	248	3.3		
	Total	841.7	251			
Commitment	Between Groups	23.2	3	7.7	2.985	NS
	Within Groups	643.2	248	2.5		
	Total	666.4	251			
Altruistic behaviour	Between Groups	2.8	3	.9	.299	NS
	Within Groups	795.3	248	3.2		
	Total	798.2	251			
Total EI	Between	417.3	3	139.1	.474	NS

	Groups					
	Within Groups	72820.5	248	293.6		
	Total	73237.9	251			

In order to find out whether there is any significant difference among students Emotional Intelligence in respect of their age.

It is inferred from obtained f value there is significant difference age in their Empathy. Since calculated f-value (.887) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different age do not differ in their Empathy.**

It is inferred from obtained f value there is significant difference age in their Self awareness. Since calculated f-value (.260) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different age do not differ in their Self awareness**.

It is inferred from obtained f value there is significant difference age in their Self motivation. Since calculated f-value (.381) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different age do not differ in their Self motivation.**

It is inferred from obtained f value there is significant difference age in their Emotional stability. Since calculated f-value (1.422) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different age do not differ in their Emotional stability.**

It is inferred from obtained f value there is significant difference age in their Managing relations. Since calculated f-value (.432) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different age do not differ in their Managing relations.**

It is inferred from obtained f value there is significant difference age in their Integration. Since calculated f-value (.204) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different age do not differ in their Integration.**

It is inferred from obtained f value there is significant difference age in their Self development. Since calculated f-value (1.053) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different age do not differ in their Self development.**

It is inferred from obtained f value there is significant difference age in their Value orientation. Since calculated f-value (.448) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different age do not differ in their Value orientation.**

It is inferred from obtained f value there is significant difference age in their Commitment. Since calculated f-value (2.985) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different age do not differ in their Commitment.**

It is inferred from obtained f value there is significant difference age in their Altruistic behaviour. Since calculated f-value (.299) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different age do not differ in their Altruistic behaviour.**

It is inferred from obtained f value there is significant difference age in their Total EI. Since calculated f-value (.474) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different age do not differ in their Total EI**.

Table – 4.9

SIGNIFICANT DIFFERENCE AMONG EMOTIONAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR FATHER'S QUALIFICATION

		Sum of squares	df	Mean squares	'F' value	Result at 5% level of significance
Empathy	Between Groups	61.2	2	30.6	2.730	NS
	Within Groups	2795.1	249	11.2		
	Total	2856.4	251			
Self-awareness	Between Groups	30.7	2	15.3	1.799	NS
	Within Groups	2125.5	249	8.5		
	Total	2156.2	251			
Self-motivation	Between Groups	16.0	2	8.0	.522	NS
	Within Groups	3815.4	249	15.3		
	Total	3831.4	251			

Emotional stability	Between Groups	.5	2	.2	.032	NS
	Within Groups	2136.6	249	8.5		
	Total	2137.2	251			
Managing relations	Between Groups	67.3	2	33.6	5.039	NS
	Within Groups	1664.1	249	6.6		
	Total	1731.4	251			
Integrity	Between Groups	29.0	2	14.5	2.670	NS
	Within Groups	1356.8	249	5.4		
	Total	1385.9	251			
Self-development	Between Groups	20.5	2	10.2	2.941	NS
	Within Groups	868.7	249	3.4		
	Total	889.2	251			
Value orientation	Between Groups	2.6	2	1.3	.390	NS
	Within Groups	839.1	249	3.3		

	Total	841.7	251			
Commitment	Between Groups	4.2	2	2.1	.800	NS
	Within Groups	662.1	249	2.6		
	Total	666.4	251			
Altruistic behaviour	Between Groups	8.0	2	4.0	1.275	NS
	Within Groups	790.1	249	3.1		
	Total	798.2	251			
Total EI	Between Groups	1380.7	2	690.3	2.392	NS
	Within Groups	71857.2	249	288.5		
	Total	73237.9	251			

In order to find out whether there is any significant difference among students emotional intelligence in respect of their father's qualification.

It is inferred from obtained f value there is significant difference father's qualification in their Empathy. Since calculated f-value (2.730) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's qualification do not differ in their Empathy.**

It is inferred from obtained f value there is significant difference father's qualification in their self awareness. Since calculated f-value (1.799) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's qualification do not differ in their self awareness.**

It is inferred from obtained f value there is significant difference father's qualification in their Self motivation.. Since calculated f-value (.522) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's qualification do not differ in their self motivation.**

It is inferred from obtained f value there is significant difference father's qualification in their Emotional stability. Since calculated f-value (.032) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's qualification do not differ in their Emotional stability.**

It is inferred from obtained f value there is significant difference father's qualification in their managing relations. Since calculated f-value (5.039) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's qualification do not differ in their managing relations.**

It is inferred from obtained f value there is significant difference father's qualification in their Integration. Since calculated f-value (2.670) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's qualification do not differ in their Integration.**

It is inferred from obtained f value there is significant difference father's qualification in their self development. Since calculated f-value (2.941) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's qualification do not differ in their self development.**

It is inferred from obtained f value there is significant difference father's qualification in their Value orientation. Since calculated f-value (.390) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's qualification do not differ in their Value orientation.**

It is inferred from obtained f value there is significant difference father's qualification in their Commitment. Since calculated f-value (.800) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's qualification do not differ in their Commitment.**

It is inferred from obtained f value there is significant difference father's qualification in their Altruistic behaviour. Since calculated f-value (1.275) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's qualification do not differ in their Altruistic behaviour.**

It is inferred from obtained f value there is significant difference father's qualification in their Total EI. Since calculated f-value (2.392) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's qualification do not differ in their Total EI.**

Table – 4.10

SIGNIFICANT DIFFERENCE AMONG EMOTIONAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR MOTHER'S QUALIFICATION

		Sum of squares	df	Mean squares	'F' value	Result at 5% level of significance
Empathy	Between	36.3	2	18.1	1.604	NS

	Groups					
	Within Groups	2820.1	249	11.3		
	Total	2856.4	251			
Self-awareness	Between Groups	5.4	2	2.7	.315	NS
	Within Groups	2150.7	249	8.6		
	Total	2156.2	251			
Self-motivation	Between Groups	21.2	2	10.6	.694	NS
	Within Groups	3810.1	249	15.3		
	Total	3831.4	251			
Emotional stability	Between Groups	6.8	2	3.4	.400	NS
	Within Groups	2130.4	249	8.5		
	Total	2137.2	251			
Managing relations	Between Groups	33.4	2	16.7	2.456	NS
	Within Groups	1697.9	249	6.8		
	Total	1731.4	251			

Integrity	Between Groups	6.4	2	3.2	.578	NS
	Within Groups	1379.7	249	5.5		
	Total	1385.9	251			
Self-development	Between Groups	30.2	2	15.1	4.378	NS
	Within Groups	859.0	249	3.4		
	Total	889.2	251			
Value orientation	Between Groups	2.4	2	1.2	.362	NS
	Within Groups	839.3	249	3.3		
	Total	841.7	251			
Commitment	Between Groups	9.2	2	4.6	1.745	NS
	Within Groups	657.2	249	2.6		
	Total	666.4	251			
Altruistic behaviour	Between Groups	30.4	2	15.2	4.939	NS
	Within Groups	767.7	249	3.0		

	Total	798.2	251			
Total EI	Between Groups	587.9	2	293.9	1.008	NS
	Within Groups	72649.9	249	291.7		
	Total	73237.9	251			

In order to find out whether there is any significant difference among students emotional intelligence in respect of their father's qualification.

It is inferred from obtained f value there is significant difference mother's qualification in their Empathy. Since calculated f-value (1.604) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's qualification do not differ in their Empathy.**

It is inferred from obtained f value there is significant difference mother's qualification in their self awareness. Since calculated f-value (.315) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's qualification do not differ in their self awareness.**

It is inferred from obtained f value there is significant difference mother's qualification in their Self motivation.. Since calculated f-value (.694) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's qualification do not differ in their self motivation.**

It is inferred from obtained f value there is significant difference mother's qualification in their Emotional stability. Since calculated f-value (.400) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's qualification do not differ in their Emotional stability.**

It is inferred from obtained f value there is significant difference mother's qualification in their managing relations. Since calculated f-value (2.456) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's qualification do not differ in their managing relations.**

It is inferred from obtained f value there is significant difference mother's qualification in their Integration. Since calculated f-value (.578) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's qualification do not differ in their Integration.**

It is inferred from obtained f value there is significant difference mother's qualification in their self development. Since calculated f-value (4.378) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's qualification do not differ in their self development.**

It is inferred from obtained f value there is significant difference mother's qualification in their Value orientation. Since calculated f-value (.362) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's qualification do not differ in their Value orientation.**

It is inferred from obtained f value there is significant difference mother's qualification in their Commitment. Since calculated f-value (1.745) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's qualification do not differ in their Commitment.**

It is inferred from obtained f value there is significant difference mother's qualification in their Altruistic behaviour. Since calculated f-value (4.939) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's qualification do not differ in their Altruistic behaviour.**

It is inferred from obtained f value there is significant difference mother's qualification in their Total EI. Since calculated f-value (1.008) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's qualification do not differ in their Total EI.**

Table – 4.11

SIGNIFICANT DIFFERENCE AMONG EMOTIONAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR FATHER'S OCCUPATION

		Sum of squares	df	Mean squares	'F' value	Result at 5% level of significance
Empathy	Between Groups	274.8	4	68.7	6.573	S
	Within Groups	2581.6	247	10.4		
	Total	2856.4	251			
Self-awareness	Between Groups	257.2	4	64.3	8.366	S
	Within Groups	1898.9	247	7.6		

	Total	2156.2	251			
Self-motivation	Between Groups	347.8	4	86.9	6.166	S
	Within Groups	3483.5	247	14.1		
	Total	3831.4	251			
Emotional stability	Between Groups	75.2	4	18.8	2.254	NS
	Within Groups	2061.9	247	8.3		
	Total	2137.2	251			
Managing relations	Between Groups	34.9	4	8.7	1.272	NS
	Within Groups	1696.5	247	6.8		
	Total	1731.4	251			
Integrity	Between Groups	82.0	4	20.5	3.886	S
	Within Groups	1303.9	247	5.2		
	Total	1385.9	251			
Self-development	Between Groups	114.1	4	28.5	9.092	S
	Within	775.1	247	3.1		

	Groups					
	Total	889.2	251			
Value orientation	Between Groups	43.0	4	10.7	3.327	NS
	Within Groups	798.7	247	3.2		
	Total	841.7	251			
Commitment	Between Groups	34.4	4	8.6	3.370	NS
	Within Groups	631.9	247	2.5		
	Total	666.4	251			
Altruistic behaviour	Between Groups	11.3	4	2.8	.892	NS
	Within Groups	786.8	247	3.1		
	Total	798.2	251			
Total EI	Between Groups	7660.6	4	1915.1	7.214	S
	Within Groups	65577.2	247	265.4		
	Total	73237.9	251			

In order to find out whether there is any significant difference among students Emotional Intelligence in respect of their father's occupation.

It is inferred from obtained f value there is significant difference father's occupation in their Empathy. Since calculated f-value (6.573) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's occupation do not differ in their Empathy.**

It is inferred from obtained f value there is significant difference father's occupation in their self awareness. Since calculated f-value (8.366) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's occupation do not differ in their self awareness.**

It is inferred from obtained f value there is no significant difference father's occupation in their Self motivation.. Since calculated f-value (6.166) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's occupation do not differ in their self motivation.**

It is inferred from obtained f value there is no significant difference father's occupation in their Emotional stability. Since calculated f-value (2.254) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's occupation do not differ in their Emotional stability.**

It is inferred from obtained f value there is significant difference father's ocupation in their managing relations. Since calculated f-value (1.272) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's occupation do not differ in their managing relations.**

It is inferred from obtained f value there is significant difference father's occupation in their Integration. Since calculated f-value (3.886) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's occupation do not differ in their Integration.**

It is inferred from obtained f value there is significant difference father's occupation in their self development. Since calculated f-value (9.092) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's occupation do not differ in their self development.**

It is inferred from obtained f value there is no significant difference father's occupation in their Value orientation. Since calculated f-value (3.327) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's occupation do not differ in their Value orientation.**

It is inferred from obtained f value there is no significant difference father's occupation in their Commitment. Since calculated f-value (3.370) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's occupation do not differ in their Commitment.**

It is inferred from obtained f value there is no significant difference father's occupation in their Altruistic behaviour. Since calculated f-value (.892) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's occupation do not differ in their Altruistic behaviour.**

It is inferred from obtained f value there is significant difference father's occupation in their Total EI. Since calculated f-value (7.214) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different father's occupation do not differ in their Total EI.**

Table – 4.12

SIGNIFICANT DIFFERENCE AMONG EMOTIONAL INTELLIGENCE AND ITS DIMENSIONS, RESPECT OF THEIR MOTHER'S OCCUPATION

		Sum of squares	df	Mean squares	'F' value	Result at 5% level of significance
Empathy	Between Groups	108.6	5	21.7	1.946	NS
	Within Groups	2747.7	246	11.1		
	Total	2856.4	251			
Self-awareness	Between Groups	186.5	5	37.3	4.658	S
	Within Groups	1969.7	246	8.0		
	Total	2156.2	251			
Self-motivation	Between Groups	308.2	5	61.6	4.304	S
	Within Groups	3523.2	246	14.3		
	Total	3831.4	251			
Emotional stability	Between Groups	94.9	5	18.9	2.288	NS
	Within	2042.2	246	8.3		

	Groups					
	Total	2137.2	251			
Managing relations	Between Groups	61.6	5	12.3	1.817	NS
	Within Groups	1669.8	246	6.7		
	Total	1731.4	251			
Integrity	Between Groups	48.7	5	9.7	1.792	NS
	Within Groups	1337.2	246	5.4		
	Total	1385.9	251			
Self-development	Between Groups	73.2	5	14.6	4.415	S
	Within Groups	816.0	246	3.3		
	Total	889.2	251			
Value orientation	Between Groups	58.8	5	11.7	3.699	S
	Within Groups	782.8	246	3.1		
	Total	841.7	251			
Commitment	Between Groups	17.5	5	3.5	1.331	NS

	Within Groups	648.8	246	2.6		
	Total	666.4	251			
Altruistic behaviour	Between Groups	9.5	5	1.9	.596	NS
	Within Groups	788.6	246	3.2		
	Total	798.2	251			
Total EI	Between Groups	5869.7	5	1173.9	4.287	S
	Within Groups	67368.1	246	273.8		
	Total	73237.9	251			

In order to find out whether there is any significant difference among students emotional intelligence in respect of their mother's occupation.

It is inferred from obtained f value there is no significant difference mother's occupation in their Empathy. Since calculated f-value (1.946) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's occupation do not differ in their Empathy.**

It is inferred from obtained f value there is significant difference mother's occupation in their self awareness. Since calculated f-value (4.658) which is significant at 5%

level. So null hypothesis is accepted. **Therefore the students with different mother's occupation do not differ in their self awareness.**

It is inferred from obtained f value there is significant difference mother's occupation in their Self motivation.. Since calculated f-value (4.304) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's occupation do not differ in their self motivation.**

It is inferred from obtained f value there is no significant difference mother's occupation in their Emotional stability. Since calculated f-value (2.288) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's occupation do not differ in their Emotional stability.**

It is inferred from obtained f value there is no significant difference mother's ocupation in their managing relations. Since calculated f-value (1.817) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's occupation do not differ in their managing relations.**

It is inferred from obtained f value there is no significant difference mother's occupation in their Integration. Since calculated f-value (1.792) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's occupation do not differ in their Integration.**

It is inferred from obtained f value there is significant difference mother's occupation in their self development. Since calculated f-value (4.415) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's occupation do not differ in their self development.**

It is inferred from obtained f value there is significant difference mother's occupation in their Value orientation. Since calculated f-value (3.699) which is significant at

5% level. So null hypothesis is accepted. **Therefore the students with different mother's occupation do not differ in their Value orientation.**

It is inferred from obtained f value there is no significant difference mother's occupation in their Commitment. Since calculated f-value (1.331) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother'soccupation do not differ in their Commitment.**

It is inferred from obtained f value there is no significant difference mother's occupation in their Altruistic behaviour. Since calculated f-value (.596) which is non significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's occupation do not differ in their Altruistic behaviour.**

It is inferred from obtained f value there is significant difference mother's occupation in their Total EI. Since calculated f-value (4.287) which is significant at 5% level. So null hypothesis is accepted. **Therefore the students with different mother's occupation do not differ in their Total EI.**

Table 4.13 CORRELATION ANALYSIS

	locality	age	gender	medium	FQ	MQ	FOCC	MOCC	Fmemb	Familytype	Emp	Selfawar	Selfmoti	Emotstab	Mangrela	integration	selfdevel	Valuorien	Commitment	Alturistic	TotalEI
schooltype	.86**	.01	-.04	.03	.12	.05	-.27**	-.32**	.07	.02	.17**	.14*	.13*	.06	-.03	.08	.14*	.06	-.05	-.03	.12
locality		.03	.06	-.10	.16*	.08	-.28**	-.27**	.04	.04	.17**	.15*	.14*	.05	-.02	.04	.14*	.10	-.03	.00	.13*
age			-.12	.05	-.11	.03	.03	.12	-.07	.07	-.07	.00	.07	.10	.04	.04	.02	.03	.10	-.01	.04
gender				.07	-.18**	-.05	.07	.17**	-.13*	.06	-.17**	-.18**	-.31**	-.16*	-.13*	-.23**	-.31**	-.10	-.14*	-.06	-.28**
medium					-.24**	-.19**	.07	.23**	-.02	-.08	-.17**	.11	.07	.08	-.01	.00	-.12	.01	.04	.13*	.02
FQ						.47**	-.09	-.25**	.05	-.02	.15*	.08	.06	.02	.14*	.14*	.13*	.02	.08	.08	.13*
MQ							.08	-.18**	-.03	.08	.06	-.02	.07	.04	.07	.06	.08	-.05	.08	.17**	.08
FOCC								.13*	.14*	-.12	-.10	-.31**	-.12	-.05	.07	-.15*	-.09	-.13*	.09	-.02	-.14*
MOCC									-.17**	.05	-.16*	-.04	-.13*	.01	-.05	-.05	-.12	.01	.04	.03	-.09
Fmemb										-.68**	.16*	.05	.07	.05	-.02	.11	.04	.04	-.01	.10	.09
Familytype											-.11	.01	-.08	-.03	.07	-.13*	-.05	-.02	.03	-.12	-.07
Emp												.38**	.45**	.41**	.38**	.39**	.39**	.28**	.34**	.23**	.68**
Selfawar													.50**	.43**	.30**	.52**	.43**	.39**	.34**	.31**	.71**
Selfmoti														.53**	.40**	.48**	.49**	.42**	.42**	.25**	.79**
Emotstab															.41**	.46**	.48**	.42**	.48**	.33**	.75**
Mangrela																.32**	.30**	.34**	.31**	.34**	.62**
integration																	.52**	.47**	.41**	.25**	.71**
selfdevel																		.41**	.39**	.14*	.67**
Valuorien																			.34**	.18**	.61**
Commitment																				.17**	.60**
Alturistic beha																					.45**

Correlation is significant at the 0.05 level (2-tailed)

Correlation is significant at the 0.01 level (2-tailed)

Coefficient of correlation between school type, father's occupation and mother's occupation are found to be -0.27 & -0.32 significant at the 1 % level. **Hence it is concluded that there is significant negative relationship between school type, father occupation and mother's occupation.** But the correlation between school type, locality, empathy, self awareness, self motivation and self development are found to be 0.86, 0.17, 0.14, 0.13 and 0.14 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between school type, locality, empathy, self awareness, self motivation and self development.**

Coefficient of correlation between locality, father's occupation and mother's occupation is found to be -0.28 and -0.27 significant at the 1 % level. **Hence it is concluded that there is significant negative relationship between locality, father's occupation and mother's occupation.** But the correlation between locality, father’s qualification, empathy, self awareness, self motivation, self development and total emotional intelligence are found to be 0.16, 0.17, 0.15, 0.14, 0.14 and 0.13 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between locality, father’s qualification, empathy, self awareness, self motivation, self development and total emotional intelligence.**

Coefficient of correlation between gender, father qualification, family members, empathy, self awareness, self motivation, emotional stability, managing relations, integration, self development, commitment and total emotional intelligence are found to be -0.18, -0.13, -0.17, -0.18, -0.31, -0.16, -0.13, -0.23, -0.31, -0.14 & -0.28 significant at 1% level. **Hence it is concluded that there is significant negative relationship between gender, further qualification, family members, empathy, self awareness, self motivation, emotional stability, managing relations, integration, self development, commitment and total emotional intelligence.** But the correlation between gender and mother's occupation are found to be 0.17 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between gender and mother's occupation.**

Coefficient of correlation between medium, father's qualification, mother qualification and empathy are found to be -0.24, -0.19and-0.17 significant at 1% level. **Hence it is concluded that there is significant negative relationship between medium, father's qualification, mother qualification and empathy.** But the correlation between medium, mother's occupation and altruistic are found to be 0.23 and 0.13 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between medium, mother's occupation and Alturistic.**

Coefficient of correlation between father qualification and mother's occupation is found to be -0.25 significant at the 1 % level. **Hence it is concluded that there is significant negative relationship between father qualification and mother's occupation.** But the correlation between father qualification, mother qualification, empathy, managing relations, integration, self development and total emotional intelligence are found to be 0.47, 0.15, 0.14, 0.14, 0.13 and 0.13 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between father qualification, mother qualification, empathy, managing relations, integration, self development and total emotional intelligence.**

Coefficient of correlation between mother qualification and mother's occupation is found to be -0.18 significant at the 1 % level. **Hence it is concluded that there is significant negative relationship between mother qualification and mother's occupation.** But the correlation between mother qualification and altruistic are found to be 0.17 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between mother qualification and altruistic.**

Coefficient of correlation between father’s occupation, self awareness, integration, value orientation and total emotional intelligence are found to be -0.31, -0.15, -0.13 & -0.14 significant at 1% level. **Hence it is concluded that there is significant negative relationship between father's occupation, self awareness, integration, value orientation and total emotional intelligence.** But the correlation between father's occupation, mother's occupation and family members are found to be 0.13 and 0.14 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between father's occupation, mother's occupation and family members.**

Coefficient of correlation between mother's occupation, family members, empathy and self motivation is found to be -0.17, -0.16and -0.13 significant at the 1 % level. **Hence it is concluded that there is significant negative relationship between mother's occupation, family members, empathy and self motivation.**

Coefficient of correlation between family members and family type is found to be -0.68 significant at the 1 % level. **Hence it is concluded that there is significant negative relationship between family members and family type.** But the correlation between family members and empathy are found to be 0.16 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between family members and empathy.**

Coefficient of correlation between family type and integration is found to be -0.13 significant at the 1 % level. **Hence it is concluded that there is significant negative relationship between family type and integration.**

Coefficient of correlation between Empathy, self awareness, self motivation, emotional stability, managing relation, integration, self development, value orientation, commitment, altruistic and total emotional intelligence are found to be 0.38, 0.45, 0.41, 0.38, 0.39, 0.39, 0.28, 0.34, 0.23 and 0.68 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between Empathy, self awareness, self motivation, emotional stability, managing relation, integration, self development, value orientation, commitment, altruistic and total emotional intelligence.**

Coefficient of correlation between self awareness, self motivation, emotional stability, managing relation, integration, self development, value orientation, commitment, altruistic and total emotional intelligence are found to be 0.50, 0.43, 0.30, 0.52, 0.43, 0.39, 0.34, 0.31 and 0.71 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between self awareness, self motivation, emotional stability, managing relation, integration, self development, value orientation, commitment, altruistic and total emotional intelligence.**

Coefficient of correlation between self motivation, emotional stability, managing relation, integration, self development, value orientation, commitment, altruistic and total emotional intelligence are found to be 0.53, 0.40, 0.48, 0.49, 0.42, 0.42, 0.25 and 0.79 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between self motivation, emotional stability, managing relation, integration, self development, value orientation, commitment, altruistic and total emotional intelligence.**

Coefficient of correlation between emotional stability, managing relation, integration, self development, value orientation, commitment, altruistic and total emotional intelligence are found to be 0.41, 0.46, 0.48, 0.42, 0.48, 0.33 and 0.75 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between emotional stability, managing relation, integration, self development, value orientation, commitment, altruistic and total emotional intelligence.**

Coefficient of correlation between managing relation, integration, self development, value orientation, commitment, altruistic and total emotional intelligence are found to be 0.32, 0.30, 0.34, 0.31, 0.34 and 0.62 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between managing relation, integration, self development, value orientation, commitment, altruistic and total emotional intelligence.**

Coefficient of correlation between integration, self development, value orientation, commitment, altruistic and total emotional intelligence are found to be 0.52, 0.47, 0.41, 0.25 and 0.71 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between integration, self development, value orientation, commitment, altruistic and total emotional intelligence.**

Coefficient of correlation between self development, value orientation, commitment, altruistic and total emotional intelligence are found to be 0.41, 0.39, 0.14 and 0.67 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between self development, value orientation, commitment, altruistic and total emotional intelligence.**

Coefficient of correlation between value orientation, commitment, altruistic and total emotional intelligence is found to be 0.34, 0.18 and 0.61 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between value orientation, commitment, altruistic and total emotional intelligence.**

Coefficient of correlation between commitment, altruistic and total emotional intelligence is found to be 0.17 and 0.60 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between commitment, altruistic and total emotional intelligence.**

Coefficient of correlation between altruistic and total emotional intelligence is found to be 0.45 significant at the 5 % level. **Hence it is concluded that there is positive significant relationship between altruism and total emotional intelligence.**

Table 4.15

STEPWISE REGRESSION BETWEEN EMOTIONAL INTELLIGENCE AND THEIR SUB SCALES

Model	B	Std. Error	Beta	Pearson r	Sr^2	Structure Coefficient
(Constant)	.952	.726				
Self motivation	1.115	.054	.255	.787	.036	.190
Emotional stability	1.361	.070	.232	.751	.032	.180
Integration	1.324	.088	.182	.712	.020	.140
Empathy	1.105	.056	.218	.677	.033	.183
Managing relations	1.180	.070	.181	.620	.024	.156
Self awareness	1.160	.069	.199	.706	.025	.157
Value orientation	1.116	.105	.120	.612	.010	.099

Note. The dependent variable **Emotional intelligence**. R^2=1, Adjusted R^2=1.Sr^2 is squared semi-partial correlation. * $p< .05$.***F (10,240) = 0.***

Table 4.15 shows school type, age**,** gender, locality, medium, mother qualification, father qualification, parent's occupation, parent's income and Emotional Intelligence were used in a stepwise multiple regression analysis to predict Emotional Intelligence of the higher secondary school students. The correlation of variables is shown in table4.14.

The prediction model contained **two** of the elevan predictors and was reached in ONE step with 9 variables removed. The model was statistically significant, ***F (2,249) = 13.331,*** p<.001 and accounted for approximately 10% of the variance of Emotional Intelligence (R^2=0.097, Adjusted R^2=0.089). Emotional Intelligence is primarily predicted by Gender followed by Locality. The raw and standardized regression coefficient of predictors together with their correlation with Emotional Intelligence, their squared semi-partial correlations, their structure coefficients are shown in table 4.14. The Gender receives strongest weight and Locality received lowest weight in this model. With the sizeable correlations between the predictors, the unique variance explained by each of the variable accounted by the squared semi-partial correlation was relatively low. The Gender and localityuniquely accounted for **approximately 8% and 2%** of the Emotional Intelligence. Inspection of the structure coefficient suggests that, **The Gender was relatively strong indicators of Emotional Intelligence and Locality was the less strong indicator of Emotional Intelligence.**

The prediction model contained one of the seven predictors and was reached in seven-steps with no variables removed. The model was statistically significant, ***F (10,240) = 0,*** p<.001 and accounted for approximately 100% of the variance of emotional intelligence(R^2=1, Adjusted R^2=1). Emotionalintelligenceis primarily predicted by Self motivation, Emotional stability, Integration, Empathy, Manging relations, Selfawareness, Valueorientation, Commitment, Alturistic behaviour and self development. The raw and standardized regression coefficient of predictors together with their correlation with Emotional intelligence, their squared semi-partial correlations, their structure coefficients are shown in table 4.14. The Selfmotivation receives strongest weight followed by and Emotional stability, Integration, Empathy, Manging relations, Selfawareness, Valueorientation, Commitment, Alturistic behaviour and selfdevelopment. Selfdevelopment received the lowest weight in model. With the sizeable correlations between the predictors, the unique variance explained by each of the variables accounted by the squared semi-partial correlation was relatively low. The Selfmotivation, Emotional stability, Integration, Empathy, Manging relations, Selfawareness, Valueorientation, Commitment, Alturistic behaviour and self development uniquely accounted for approximately 4%,3%,2%,3%,2%,2% and 1% of the Emotional intelligence. Inspection of the structure coefficient suggests that, **The Selfmotivation and Emotional stability were relatively dominant factor of Emotional Intelligence and selfdevelopment was relatively moderate factor of Emotional Intelligence and selfdevelopment were least influencing factor of Emotional intelligence.**

Chapter V

Summary, Findings Suggestions and Conclusion

CHAPTER V

5.1 SUMMARY

The current investigation was planning to assess Emotional Intelligence of higher secondary school students in Cuddalore district, Tamil Nadu. Emotional Intelligence scale constructed and standardized by researcher and guide is used to collect data from 252 higher secondary school students randomly. The scale contains 34 items in 10 dimensions. The collected data were analyzed with help of IBMSPSS23. Statistical techniques like Descriptive analysis, inferential analysis, correlation analysis and regression analysis have been used in this study. The higher secondary school student self-esteem is very high (136). Medium and Gender shows significant relationship with Emotional Intelligence of higher secondary school students. A stepwise regression was carried out to find the predication model for Emotional Intelligence. The predication model contained three of the 116 ten predictors and was reached in 3 steps with 7 variables removed. The prediction model contained **two** of the elevan predictors and was reached in ONE step with 9 variables removed. The model was statistically significant, ***F (2,249) = 13.331,*** p<.001 and accounted for approximately 10% of the variance of Emotional Intelligence (R^2=0.097, Adjusted R^2=0.089). Emotional Intelligence is primarily predicted by Gender followed by Locality. The raw and standardized regression coefficient of predictors together with their correlation with Emotional Intelligence, their squared semi-partial correlations, their structure coefficients are shown in table 4.14. The Gender receives strongest weight and Locality received lowest weight inthis model. With the sizeable correlations between the predictors, the unique variance explained by each of the variable accounted by the squared semi-partial correlation was relatively low. The Gender and locality uniquely accounted for **approximately 8% and 2%** of the Emotional Intelligence. Inspection of the structure coefficient suggests that, **The Gender was**

relatively strong indicators of Emotional Intelligence and Locality was the less strong indicator of Emotional Intelligence.

5.2 MAJOR FINIDINGS

EMOTIONAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS

- 73.87 percent of students have high level Emotional Intelligence.
- The higher secondary school students Emotional Intelligence is average.
- The Self financing school students' Emotional intelligence is more than the Government and aided school students.
- The rural school students' Emotional intelligence is more than the urban students.
- The school students with 17 years of age high level of emotional intelligence than others.
- The male school students' Emotional intelligence is more than the female students.
- The Tamil medium school students' Emotional intelligence is more than the English medium students.
- The graduate father students' Emotional intelligence is more than others.
- The graduate mother students' Emotional intelligence is more than others.
- The graduate mother students' Emotional intelligence is more than others.
- The graduate mother students' Emotional intelligence is more than others.
- It is concluded that the male and female respondent do not differ in their Empathy.
- It is concluded that the male and female respondent do not differ in their Selfawareness.
- It is concluded that the male and female respondent do not differ in their Self motivation**.**

- It is concluded that the male and female respondent do not differ in their Emotional stability.
- It is concluded that the male and female respondent do not differ in their managing relations.
- It is concluded that the male and female respondent do not differ in their Integrity.
- It is concluded that the male and female respondent do not differ in their Self development.
- It is concluded that the male and female respondent do not differ in their Value orientation.
- It is concluded that the male and female respondent do not differ in their Commitment.
- It is concluded that the male and female respondent do not differ in their Altruistic behaviour.
- It is concluded that the English and tamil respondent do not differ in their Empathy.
- It is concluded that the English and tamil respondent do not differ in their Selfawareness..
- It is concluded that the English and tamil respondent do not differ in their Self motivation
- It is concluded that the English and tamil respondent do not differ in their Emotional stability.
- It is concluded that the English and tamil respondent do not differ in their Managing relations
- It is concluded that the English and tamil respondent do not differ in their Integrity.
- It is concluded that the English and tamil respondent do not differ in their Self development.

- It is concluded that the English and tamil respondent do not differ in their Value orientation.
- It is concluded that the English and tamil respondent do not differ in their Commitment.
- It is concluded that the English and tamil respondent do not differ in their Altruistic behaviour.
- It is concluded that the English and tamil respondent do not differ in their Total EI.
- It is concluded that the joint and neutral family respondent do not differ in their Empathy.
- It is concluded that the joint and neutral family respondent do not differ in their Self awareness.
- It is concluded that the joint and neutral family respondent do not differ in their Self motivation.
- It is concluded that the joint and neutral family respondent do not differ in their Emotional stability.
- It is concluded that the joint and neutral family respondent do not differ in their Managing relations.
- It is concluded that the joint and neutral family respondent do not differ in their Integrity.
- It is concluded that the joint and neutral family respondent do not differ in their Self development.
- It is concluded that the joint and neutral family respondent do not differ in their Value orientation.
- It is concluded that the joint and neutral family respondent do not differ in their Commitment.

- It is concluded that the joint and neutral family respondent do not differ in their Altruistic behaviour.
- It is concluded that the joint and neutral family respondent do not differ in their Total EI.
- The students with different school type differ in their Empathy.
- The students with different school type do not differ in their Self awareness.
- The students with different school type do not differ in their Self motivation.
- The students with different school type do not differ in their Emotional stability.
- The students with different school type do not differ in their Managing relations.
- The students with different school type do not differ in their Integration.
- The students with different school type differ in their Self development.
- The students with different school type do not differ in their Value orientation.
- The students with different school type do not differ in their Commitment.
- The students with different school type do not differ in their Altruistic behaviour.
- The students with different school type do not differ in their Total EI.
- The students with different age do not differ in their Empathy.
- The students with different age do not differ in their Self awareness.
- The students with different age do not differ in their Self motivation.
- The students with different age do not differ in their Emotional stability.
- The students with different age do not differ in their Managing relations.
- The students with different age do not differ in their Integration.
- The students with different age do not differ in their Self development.
- The students with different age do not differ in their Value orientation.
- The students with different age do not differ in their Commitment.
- The students with different age do not differ in their Altruistic behaviour.

- The students with different age do not differ in their Total EI.
- The students with different father's qualification do not differ in their Empathy.
- The students with different father's qualification do not differ in their self awareness.
- The students with different father's qualification do not differ in their self motivation.
- The students with different father's qualification do not differ in their Emotional stability.
- The students with different father's qualification do not differ in their managing relations.
- The students with different father's qualification do not differ in their Integration.
- The students with different father's qualification do not differ in their self development.
- The students with different father's qualification do not differ in their Value orientation.
- The students with different father's qualification do not differ in their Commitment.
- The students with different father's qualification do not differ in their Altruistic behaviour.
- The students with different father's qualification do not differ in their Total EI.
- The students with different mother's qualification do not differ in their Empathy.
- The students with different mother's qualification do not differ in their self awareness.
- The students with different mother's qualification do not differ in their self motivation.
- The students with different mother's qualification do not differ in their Emotional stability.

- The students with different mother’s qualification do not differ in their managing relations.
- The students with different mother’s qualification do not differ in their Integration.
- The students with different mother’s qualification do not differ in their self development.
- The students with different mother’s qualification do not differ in their Value orientation.
- The students with different mother’s qualification do not differ in their Commitment.
- The students with different mother’s qualification do not differ in their Altruistic behaviour.
- The students with different mother’s qualification do not differ in their Total EI.
- The students with different father’s occupation do not differ in their Empathy.
- The students with different father’s occupation do not differ in their Empathy.
- The students with different father’s occupation do not differ in their self awareness.
- The students with different father’s occupation do not differ in their self motivation.
- The students with different father’s occupation do not differ in their Emotional stability.
- The students with different father’s occupation do not differ in their managing relations.
- The students with different father’s occupation do not differ in their Integration.
- The students with different father’s occupation do not differ in their self development.
- The students with different father’s occupation do not differ in their Value orientation.
- The students with different father’s occupation do not differ in their Commitment.

- The students with different father's occupation do not differ in their Altruistic behaviour.
- The students with different father's occupation do not differ in their Total EI.
- The students with different mother's occupation do not differ in their Empathy.
- The students with different mother's occupation do not differ in their self awareness.
- The students with different mother's occupation do not differ in their self motivation.
- The students with different mother's occupation do not differ in their Emotional stability.
- The students with different mother's occupation do not differ in their managing relations.
- The students with different mother's occupation do not differ in their Integration.
- The students with different mother's occupation do not differ in their self development.
- The students with different mother's occupation do not differ in their Value orientation.
- The students with different mother'soccupation do not differ in their Commitment.
- The students with different mother's occupation do not differ in their Altruistic behaviour.
- The students with different mother's occupation do not differ in their Total EI.

5.3 SUGGESTIONS

Following suggestions are given for future research.

5.3.1 A similar study may undertake to study the Emotional Intelligence of College students, D.T.Ed trainers, school teachers, B.Ed. teacher students.

5.3.2 A similar study may undertake to study the Emotional Intelligence and its relationship with other factor like Personality, Achievement, Leadership qualities and Motivation.

5.3.3 Comparative analysis can also be done among English and Tamil medium high schools, higher secondary schools students.

5.3.4 Comparative analysis can also be done among Urban and Rural high schools, higher secondary schools students.

5.3.5 Comparative analysis can also be done among D.T.Ed and B.Ed. trainers, School and college teachers.

5.4 RECOMMENDATION

5.4.1 Encourage the students to improve their emotional intelligence.

5.4.2 Encourage the students to develop their self-concept and self-personality.

5.4.3 Teacher should encourage the students' leadership's quality, creativity.

5.4.4 Parents make their child always free and enthusiastic manner.

5.5 CONCLUSION

The students studying in Government schools, female with 16 years of age, living in Urban, studying in Tamil medium, having Professional qualified Father and Mother, children of business parents are having more Emotional Intelligence. Personal variables created **19%** of variation in the emotional intelligence of higher secondary school children. Emotional Intelligence of higher secondary school students are at very high level. **So the educational institutions should give opportunity to have a real assessment about their students. Over expectation of the children about their capabilities results in fear of failure, worth less feeling etc. and causes maladjustment among students. So educational institutions should give proper counseling to the students to accept the reality and adjust to the reality.**

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Appendix

O.P.R. MEMORIAL COLLEGE OF EDUCATION

VADALUR – 607303

EMOTIONAL INTELLIGENCE OF HIGHER SECONDARY SCHOOL STUDENTS IN CUDDALORE DISTRICT

I have taken up a project work on “Emotional Intelligence of Higher Secondary School students in Cuddalore district”. In this regard I seek your co-operation and responses, kindly provide the data asked here and your responses will be used only for this project work.

Thank you

L. Bhuvaneswari

Personal Data

Name of the student	
Name of the school	
Type of school	Government/Self-financing/Aided
Locality	Rural / Urban
Age	
Gender	Male/ Female
Medium	English/Tamil
Father’s Qualification	IIliterate / Literate/ Graduate
Mother’s Qualification	IIliterate / Literate/Graduate
Father’s Occupation	Government / Private/ Agriculture/ Coolie/Business
Mother’s Occupation	Home maker/ Government / Private/ Agriculture/ Coolie/Business
No.of family members	
Type of family	Joint family/ Neutral family

	Emotional Intelligence scale	SA	A	N	D	SD
1	I can encourage others to work even when things are not favorable. சூழ்நிலை சாதகமாக இல்லாத போதும் மற்றவர்களை தொடர்ந்து வேலையில் ஈடுபடுமாறு ஊக்குவிக்கிறேன்.					
2	People tell me that I am an inspiration for them. நான் ஊக்குவிக்கும் காரணியாக அவர்களுக்கு விளங்குவதாக மற்றவர்கள் என்னிடம் கூறுகின்றனர்.					
3	I am able to encourage people to take initiative. மற்றவர்களை செயல்களில் ஈடுபட ஊக்குவிக்க என்னால் முடிகிறது					
4	I am able to make intelligent decisions using a healthy balance of emotions and reason. சிந்தனையையும் உணர்வுகளையும் சிறப்பாக சமன் செய்து அறிவு பூர்வமான முடிவுகளை எடுக்க என்னால் முடிகிறது.					
5	I do not depend on others encouragement to do my work well. என் பணியை சிறப்பாக செய்ய மற்றவர்கள் என்னை ஊக்குவிக்க வேண்டுமென எதிர்ப்பார்ப்பதில்லை.					
6	I can continue to do what I believe in, even under severe criticism. கடுமையான விமர்சனத்தையும் மீறி நான் எதை நம்புகிறேனோ அதை தொடர்ந்து செய்கிறேன்.					
7	I am able to assess the situation and then behave. என்னால் சூழ்நிலையை சரியாக மதிப்பீடு செய்து தக்கபடி நடந்து கொள்ள முடிகிறது.					
8	I can concentrate on task at hand in spite of disturbance. இடையூறுகள் இருந்தாலும் கைமேலுள்ள வேலையில் கவனம் செலுத்துகிறேன்.					
9	I pay attention to worries and concerns of others. மற்றவர்களுடைய கவலைகள் பிரச்சனைகள் இவற்றை நான் கருத்தில் கொள்கிறேன்.					
10	I can listen to someone without the urge to say something. சொல்லவெண்டும் என்ற உந்துதல் இன்றி மற்றவர்கள் சொல்வதை கேட்கிறேன்.					
11	I am perceived as friendly and outgoing. நான் நட்புடனும், பரந்தநோக்குடனும் இருப்பதாக கருதப்படுகிறேன்.					
12	I have my priorities clear. நான் முதன்மையாக கருத வேண்டியவற்றைப் பற்றி தெளிவாக இருக்கிறேன்.					
13	I can handle conflicts around me. என்னைச் சுற்றியுள்ள போராட்டங்களை சமாளிக்க என்னால் முடியும்.					
14	I cannot mix unnecessary emotions with issues in hand. கைமேலுள்ள பிரச்சினைகளுடன் தேவையற்ற உணர்ச்சிகளை கலப்பதில்லை.					
15	I try to see the other person’s point of view. மற்றவர்களை பார்த்து பகிர்ந்து கொள்ள முயல்கிறேன்.					
16	I can stand up for my beliefs. என் நம்பிக்கைகளில் நான் உறுதியுடன் இருக்கிறேன்.					
17	I can see the brighter side of my situations. என் சூழ்நிலையிலுள்ள சாதகமான அம்சங்களை என்னால் காண இயலும்.					

18	I believe in myself. என் மீது எனக்கு நம்பிக்கை உள்ளது.					
19	I am able to stay composed in both good and bad situations. நல்ல சூழ்நிலை கெட்ட சூழ்நிலை எதுவாயினும் அமைதியுடன் அதை எதிர்கொள்ள என்னால் முடிகிறது.					
20	I am able to stay focused even under pressure. பல தாக்கங்களுக்கிடையேயும் என்னால் கவனத்துடன் இருக்க முடிகிறது					
21	I can see the brighter side of my situations. என் சூழ்நிலையிலுள்ள சாதகமான அம்சங்களை என்னால் காண இயலும்.					
22	I am able to confront unethical actions of others. மற்றவர்களின் நேர்மையற்ற செயல்களை என்னால் சமாளிக்க முடிகிறது.					
23	I am able to meet commitments and keep promises என்னுடைய பொறுப்புகளை சமாளிக்கவும் என் வாக்குறுதிகளை நிறைவேற்றவும் என்னால் முடிகிறது					
24	I am organized and careful in my work. கவனத்துடனும் சரியான அமைப்புகளுடனும் என் பணியை செய்கிறேன்.					
25	I am able to meet multiple demands. பல்வேறு பிரச்சினைகள்,தேவைகள் இவற்றை சமாளிக்க என்னால் முடிகிறது.					
26	I am comfortable and open to novel ideas and new information. புதிய கருத்துகள் செய்திகள் இவற்றை நான் வரவேற்கிறேன்.					
27	I pursue goals beyond what is required and expected of me. எனக்கு தேவையானவற்றையும், என்னிடமிருந்து எதிர்பார்க்கப்படுவதையும் மீறி குறிக்கோள்களை அடையமுயல்கிறேன்.					
28	I am persistence in perusing goals despite of obstacles and setbacks. இடையூறுகள்,பின்னடைவுகள் இருந்தபோதிலும் என் குறிக்கோள்களை விடாமுயற்சியுடன் தொடர்கிறேன்.					
29	I have built rapport and maintain personal friendship with work associates. சக பணியாளர்களிடம் நல்லுறவையும் நெருங்கிய நட்பையும் வளர்த்துள்ளேன்.					
30	I am able to identify and separate my emotions. என் உணர்வுகளை அடையாளம் கண்டு அவற்றை வகைப்படுத்த என்னால் முடிகிறது					
31	I think feeling should be managed. நாம் உணர்வுகளை கட்டுப்பாட்டில் வைக்க வேண்டும் என கருதுகிறேன்.					
32	I am aware of my weakness. என் குறைகளை நான் உணர்கிறேன்.					
33	I feel that I must develop myself even when my job does not demand it. என் தொழிலுக்கு அவசிமில்லாவிடிலும் நான் என் திறன்களை வளர்த்துக்கொள்ள வேண்டும் என கருதுகிறேன்.					
34	I believe that happiness is the positive attitude. மகிழ்ச்சி என்பது ஒரு சரியான அணுகுமுறை என கருதுகிறேன்.					
SA=Strongly Agree **A** = Agree **N** = Neutral **D**= Disagree **SD**= Strongly Disagree						

A Study on Stress Level of Higher Secondary School Students

Ms K Kavitha

A STUDY ON STRESS LEVEL OF HIGHER SECONDARY SCHOOL STUDENTS

Dissertation Submitted To
TAMILNADU TEACHERS EDUCATION UNIVERSITY
In partial Fulfillment of the requirements
For the degree of

MASTER OF EDUCATION

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Place: Vadalur **KAVITHA .K**

Date:

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Chapter I

Introduction

CHAPTER-I

INTRODUCTION

INTRODUCTION

Stress affects high school students the most. Therefore, knowing the teacher, the student, the parent, the student's stress level and correcting it can save the students from mental damage and increase the students' attention span and help them to develop their knowledge well. That's why I chose this topic and did research. I hope that my research paper will help not only the social people, teachers, students and parents to know the mood of the students in higher education but also to realize their mood, adjust them and engage in creative things to succeed in it and progress in life. In addition, parents and teachers are better able to fulfil their responsibilities and achieve their goals.

Stress is a widespread phenomenon all around during all human lifespan. All people have experienced it throughout their history and throughout human history. Stress is one the special characteristics of life and its presence has been much highlighted so that in fine arts and literature of all eras it has been addressed. The reason of the widen presence and inclusiveness of stress in human communities is the complexity of human social, personal, and ecological environment, multiple and simultaneously interactions of human with surrounding issues, and diversity in stress expression.

Academic stress defined as a mental distress with respect to some anticipated frustration associated with academic failure or even unawareness to the possibility of such failure. Students have to face many academic demands, such as- school examination and tests, answering the questions in the class, showing progress in school subject. Understanding what a teacher is teaching, competing with other classmates, fulfilling teachers and parents' academic expectations. Academic stress as a stress arising from important factors like writing term papers, text anxiety, poor study skills, excessive academic load and classroom environment, which in the turn forms a major part of general stress in adolescent students. Academic stress essentially relates to mental distress associated with some anticipated frustration on account of academic failure or even a realization of the possibility of such a failure. Academic stress is anything that imposes an extra demand on a person's ability to cope, often with something that a new and different in academic. Academic stress is an important factor accounting for variation in academic achievement. Academic stress is conceptualized as interaction between students' environment, stressors, cognitive appraisal and coping with physiological and psychological response to stress and stressors related to academics.

1.1 THEORITICAL BACKGROUND

STRESS: MEANING

"Stress is a term people often use to describe a feeling of pressure, strain, or tension. People often say that they are "under stress" or feel "stressed out" when they are dealing with challenging situations or events. Everyone encounters stressful situations. Sometimes the stress comes from something positive (like a new job, new apartment, or new relationship) and sometimes from something negative (like being bored, having an argument with someone, or being the victim of crime).

CONCEPT OF STRESS

In a medical or biological context

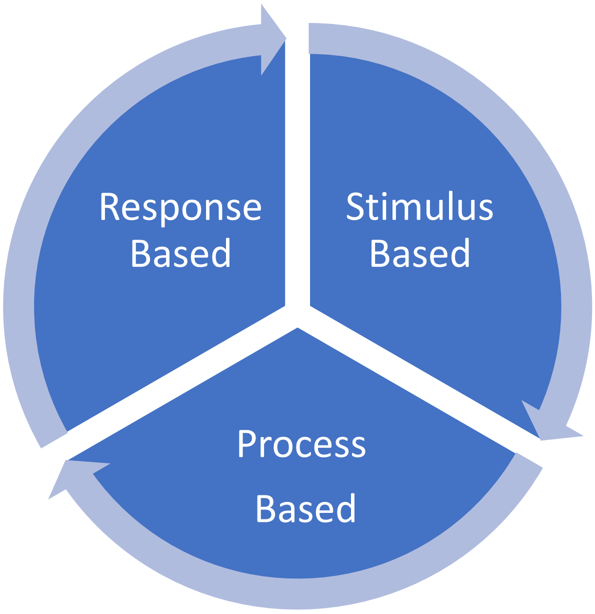
Stress is a physical, mental, or emotional factor that causes bodily or mental tension. Stresses can be external (from the environment, psychological, or social situations) or internal (illness, or from a medical procedure). Stress can initiate the "fight or flight" response, a complex reaction of neurologic and endocrinologic systems.

Stress can be positive or negative:

Stress is good well the situation offers an opportunity to a person to gain something. It acts as a motivator for peak performance.

Stress is negative when a person faces social, physical organizational and emotional problems

Stress has been viewed in three ways:



1. Stimulus
2. Response
3. Process

Stimulus refers to stress, which can be categorized as emanating from three sources:

1. Catastrophic events, such as tornadoes and earthquakes
2. Major life events
3. Chronic circumstances, such as living in crowded or noisy conditions.

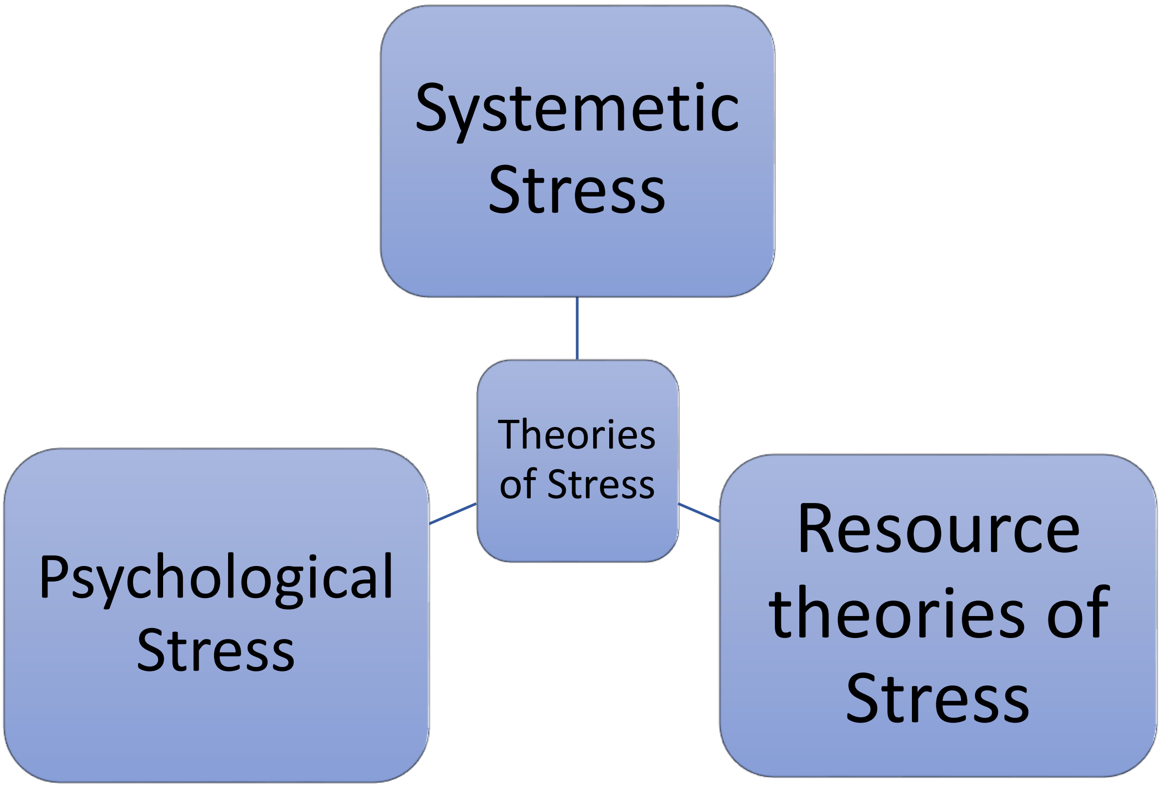
Response refers to how somebody responds to a particular stress, for example sitting an examination. There are two components:

1. Physiological, heightened bodily arousal-your heart pounds, mouth goes dry your stomach feels tight and you perspire.
2. Psychological, involving behaviour, thought patterns, and emotions. Feeling nervous.

Process views stress as a series of interactions and adjustments between the person and the environment. These interactions and adjustments are called transactions. Stress is not seen as a stimulus or a response, but rather as a process. The person suffering stress is seen as an active agent who can influence the impact of a stressor through behavioural, cognitive and emotional strategies.

1.2 THEORIES OF STRESS

Theories that focus on the specific relationship between external demands (stressors) and bodily processes (stress) can be grouped in two different categories: approaches to `systemic stress' based in physiology and psychobiology (among others, Selye 1976) and approaches to `psychological stress' developed within the field of cognitive psychology.



Systemic Stress: Selye's Theory

The popularity of the stress concept in science and mass media stems largely from the work of the endocrinologist Hans Selye. In a series of animal studies, he observed that a variety of stimulus events (e.g., heat, cold, toxic agents) applied intensely and long enough are capable of producing common effects, meaning not specific to either stimulus event. (Besides these nonspecific changes in the body, each stimulus produces, of course, its specific effect, heat, for example, produces vasodilatation, and cold vasoconstriction.) According to Selye, these non-specifically caused changes constitute the stereotypical, i.e., specific, response pattern of systemic stress. Selye defines this stress as `a state manifested by a syndrome which consists of all the non-specifically induced changes in a biologic system.'

Psychological Stress: The Lazarus Theory

Two concepts are central to any psychological stress theory: appraisal, i.e., individuals' evaluation of the significance of what is happening for their well-being, and coping, i.e., individuals' efforts in thought and action to manage specific demands.

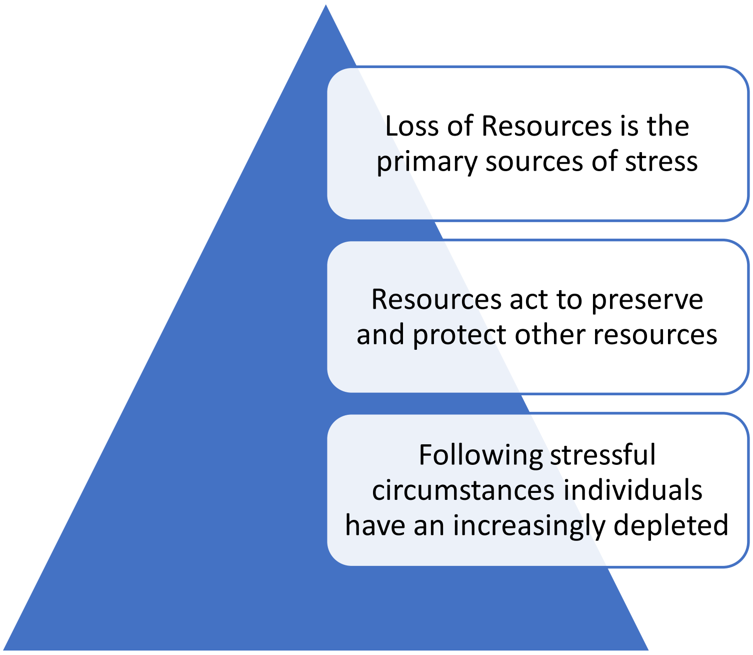
The concept of appraisal, introduced into emotion research by Arnold and elaborated with respect to stress processes by Lazarus, is a key factor for understanding stress-relevant transactions. This concept is based on the idea that emotional processes (including stress) are dependent on actual expectancies that persons manifest with regard to the significance and outcome of a specific encounter. This concept is necessary to explain individual differences in quality, intensity, and duration of an elicited emotion in environments that are objectively equal for different individuals. It is generally assumed that the resulting state is generated, maintained, and eventually altered by a specific pattern of appraisals. These appraisals, in turn, are determined by a number of personal and situational factors. The most important factors on the personal side are motivational dispositions, goals, values, and generalized expectancies. Relevant situational parameters are predictability, controllability, and imminence of a potentially stressful event.

Resource Theories of Stress

A Bridge between Systemic and Cognitive Viewpoints Unlike approaches discussed so far, resource theories of stress are not primarily concerned with factors that create stress, but with resources that preserve well-being in the face of stressful encounters. Several social and personal constructs have been proposed, such as social support, sense of coherence, self-efficacy, or optimism. Whereas self-efficacy and optimism are single protective factors, hardiness and sense of coherence represent tripartite approaches. Hardiness is an amalgam of three components: internal control, commitment, and a sense of challenge as opposed to threat. Similarly, sense of coherence consists of believing that the world is meaningful, predictable, and basically benevolent. Within the social support field, several types have been investigated, such as instrumental, informational, appraisal, and emotional support.

The recently offered conservation of resources (COR) theory assumes that stress occurs in any of three contexts: when people experience loss of resources, when resources are threatened, or when people invest their resources without subsequent gain. Four categories of resources are proposed: object resources (i.e., physical objects such as home, clothing, or access to transportation), condition resources (e.g., employment, personal relationships), personal resources (e.g., skills or self-efficacy), and energy resources (means that facilitate the attainment of other resources, for example, money, credit, or knowledge). Hobfoll and co-workers outlined a number of testable hypotheses (called principles) derived from basic assumptions of COR.

Resources Theories of Stress

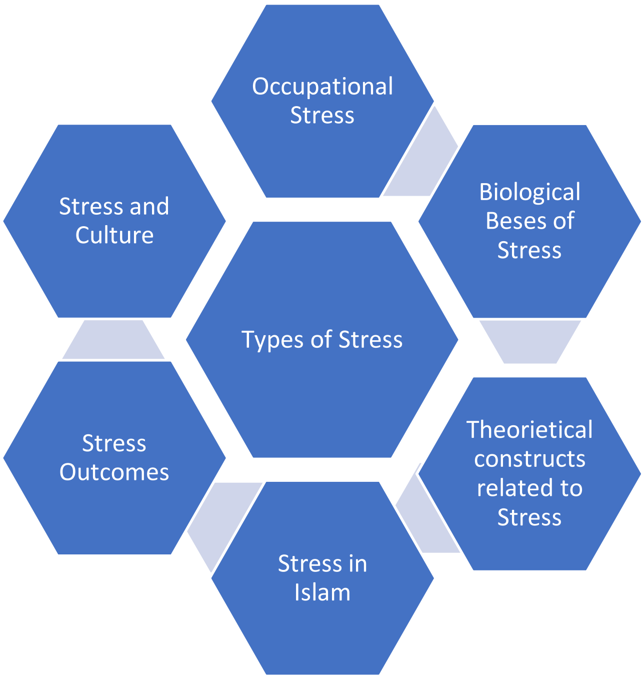

Loss of Resources is the primary sources of stress
Resources act to preserve and protect other resources
Following stressful circumstances individuals have an increasingly depleted

1. Loss of resources is the primary source of stress: This principle contradicts the fundamental assumption of approaches on critical life events that stress occurs whenever individuals are forced to readjust themselves to situational circumstances, may these circumstances be positive (e.g., marriage) or negative (e.g., loss of a beloved person). In an empirical test of this basic principle, Hobfoll and Lilly found that only loss of resources was related to distress.

2. Resources act to preserve and protect other resources: Self-esteem is an important resource that may be beneficial for other resources. Hobfoll and Lieberman, for example, observed that women who were high in self-esteem made good use of social support when confronted with stress, whereas those who lacked self-esteem interpreted social support as an indication of personal inadequacy and, consequently, misused support.

3. Following stressful circumstances, individuals have an increasingly depleted resource pool to combat further stress: This depletion impairs individuals' capability of coping wih further stress, thus resulting in a loss spiral. This process view of resource investment requires to focus on how the interplay between resources and situational demands changes over time as stressor sequences unfold. In addition, this principle shows that it is important to investigate not only the effect of resources on outcome, but also of outcome on resources.

1.4. TYPES OF STRESS



1.4.1 Occupational stress:

In recent decades, stress and its influences have gained much attraction in organizations. Stress has many influences on performance and activities of members of any organization. Managers, staff, and clients of a given organization, under psychological stress, would stick in specific psychological states and act in a way that directly Shajarian A. et al, Stress: Facts and Theories through Literature Review International Journal of Medical Reviews, Volume 2, Issue 2, Spring 2015 233 reflects in organizational outcome. Psychological strain has also physical impacts and makes vast damages to organizations. Acute stress impairs labour force of organizations and makes organizational goals wobbly. Literature review about occupational stress revealed seven major definition in this domain with the dominance of WHO's definition of occupational stress which acknowledges it as a response of individual whenever confronting to job demands that are not fit with their knowledge and capability and challenge their ability to. Rapid changes in knowledge and technology results in vast alterations in structures and goals of organizations. These alterations in nature of organizations have in increase increase in the number of stressful workplaces which show themselves in different forms. These forms include uncontrollability on workplace, less holidays, more working hours, insufficient rewards, fragile future of occupational promotions, increase in time press, lack of support, withdrawal, harassment, role conflict, and issues related to job-life balance Studies of occupational stress in Iran have provided magnificent information about job strain which reveals high levels of occupational stress in varied labour sectors and a great need to investigate the causes and methods of optimum reduction and prevention of occupational stress.

Job burnout

Job Burnout is a situation of emotional, psychological, and physical exhaust which is caused by prolonged exposure to occupational stress. In this definition, emotional burnout refers to evacuation of emotional resources. When emotional burnout occurs, individual gets suspicious. Following suspicion, individual becomes distant to her/his approach to her/his occupation and therefore, lose her/his occupational efficacy. This ends in a dissatisfaction of previous and current expectation. High levels of stress causes job burnout. Whenever individual experiences high, continuous, and uncontrolled stress of workplace, demands of workplace exceed individual’s capabilities and cannot reach her/his goals, whenever endurance threshold of individual is low and cannot cope with occupational strain, she/he is more exposed to job burnout. Job burnout does not occur at once, rather, it occurs gradually within five stages of honey moon, lack of energy, initiation of chronic signs of burnout, crisis, and reaching a stalemate, respectively. Typically, job burnout occurs in labours of human services.

1.4.2 Biological bases of stress:

***Autonomic Nervous System (ANS)** has the central role in related mechanisms of stress in body.

* **Sympathetic Nervous System (SNS)** is activated as primary response to stress and regulates many of physiological functions of body, so that the living being can adapt to surrounding environment as much as possible.

* In the process of stress response, **Hypothalamus** secrets various hormones, among which is corticotropin releasing hormone (CRH) that is responsible to stimulate pituitary gland and initiation of the intensively-regulated pathway of stress response.

* **Pituitary gland secrets hormones such as Adrenocorticotrophic hormone (ACTH)** to bloodstream, which balances the intensively-regulated response to stress. It appears that Amygdale has role in emotional processes and acts as a regulator of feelings, such as anxiety and fear, during the stress response. During stress, hippocampus becomes very important, because cognitive processes like last memories can have drastic impacts on facilitation, inhibition, and even generating distinct response to stress.

* **Norepinephrine** has the central role in the process of messaging in SNS in the time of fight-or-flight response. This region of brain receives inputs from hypothalamus, Amygdale, and raphe nucleus, and its neural extensions goes towards all parts of the brain and spinal cord.

* **Raphe nucleus** is a region in pons and has the central role of serotonin neurotransmitter.

* **Serotonin** regulates the mood, especially when stress is accompanied with depression and/or anxiety.

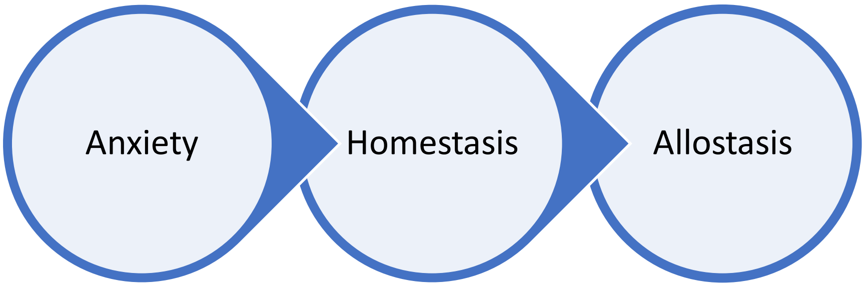
* **Adrenal glands** are directly responsible of production of stress hormones which would be secreted in the time of stress response. The most important stress hormone is cortisol which is produced and secreted by adrenal glands.

* In addition to locus coeruleus which secrets norepinephrine in **central nervous system (CNS)**, adrenal glands can secret noradrenalin (synonymous to norepinephrine in brain, but in blood) in blood in the time of stress.

* **Hypothalamus**-pituitary-adrenal (HPA) axis is a complex set of influences and feedback between three endocrine glands of hypothalamus, pituitary, and adrenal glands. Mutual interactions between these three glands shapes HPA axis which form major part of the neuroendocrine system, control body reactions to stress, and regulates many bodily processes include digestion, autoimmune system, mood, sexual cycles, and saving and consumption of energy. HPA axis is a multi-stage pathway in which information are transferred by chemical messengers from one point to another point of the body.

1.4.3 Theoretical constructs related to stress:

*Stress is not a simple and unimodal phenomenon. On the contrary, various and different dimensions are assumed for it. Reaching a theoretical and practical understanding of diverse aspects of the stress is needed to study, assess, and manage the stress. According to the literature review, the most related constructs to stress are anxiety, homeostasis, and allostasis.



* **Anxiety** is a multidimensional concept and has varied levels and appears as a physical, cognitive, affective, and interpersonal phenomenon. Anxiety is a warning signal which alerts individual; it admonishes individual that a danger is forthcoming so that individual can prepare her/himself to cope with danger.

* **Homeostasis** is the key feature of any system in which its variables are set in the way that internal states become stable and relatively constant throughout the time. This process is the most important trend of the body to maintain internal stability in response to changes of external situations.

* **Allostasis** is the process of reaching to equilibrium and stability, or homeostasis, in the time of confronting stress via psychological and/or behavioural changes. This can be due to changes in the level of HPS axis hormones, autoimmune system, cytokines, and/or other involved systems in stress response, and in general, its goal is adaptation in optimally minimum time. Allostasis is a vital process to maintain homeostasis amid changing situations.

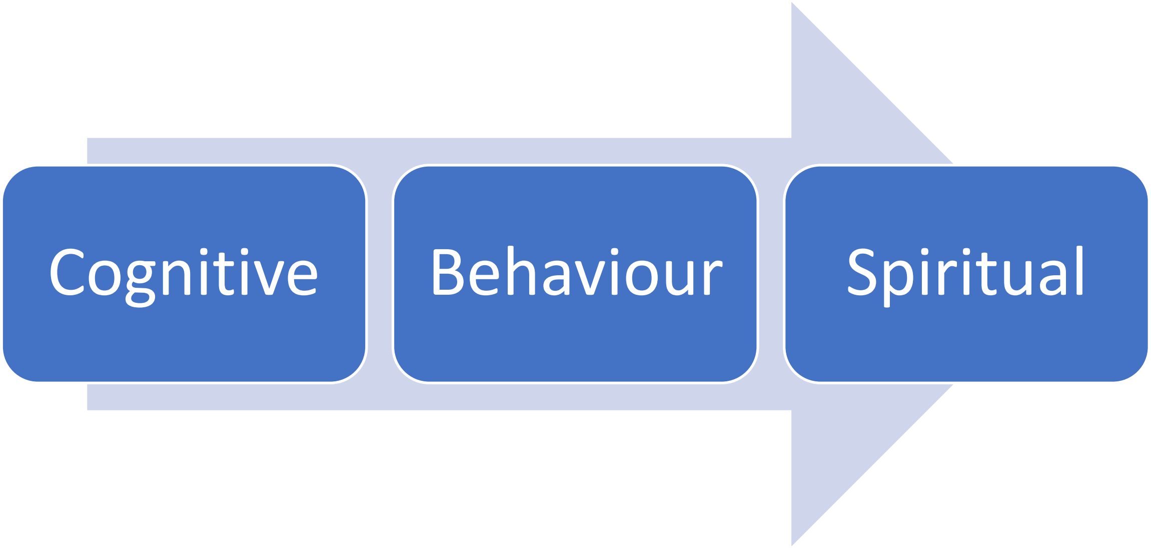
*Allostasis emphasizes on how human can survive and reach to homeostasis by adaptation to changing situations, with consideration of vital parameters of life processes, because chronic over-activity of regulative systems ends in vulnerability of individual to physiological harms.

1.4.4 Stress in Islam:

*Holy Quran and Ahl-al-Bayt (PUT) have many (non)materialistic instructions to avoid mental problems, especially stress. In Quran words and Instructions of Ashall-Bayt (PUT) several ways are suggested to avoid and reduce daily stress. In this doctrine, faith, remembrance of God, trust in God, virtue, piety, penitence, reliance on God’s mercy, patience, prayer, worship, chastity, and continence are prescribed as ways of stress reduction and reaching to internal peace.

* In viewpoint of Holly Quran, whoever has been nurtured through Islamic teachings, is inoculated from varied life stressors. Any human kind who has perceived the reality of the world and thought about God’s creatures, would not fear from many things that other do and sees the facts is they are and accepts them.

* Islamic teachings have methods to identify, assess, and cope with stress as well as adaptation with difficulties which could be divided into three parts of cognitive, behavioural, and affective/spiritual methods.



Cognitive

Behaviour

Spiritual

1. **Cognitive methods** are ways that are dealing with cognitions, beliefs, and ideas. In These methods, individual uses religious cognitions to cope with stress and deal with problems with her/his own mental and thinking capabilities. Although cognitions and beliefs are represented in behaviours, their impression would be related to cognitive mechanisms of individuals.
2. **Behavioural methods** command and practical words, include codes of conduct, mutual relations, and their influence on coping with difficulties and stress are addressed.
3. **Affective/spiritual methods** (prayers), individual develops a kind of affective relation with God and saints. These relations could support human in the process of identification and confrontation with problems and suitably resolve and fix them.

The most important stressors, form Islamic approach, are natural and beyond-human-power factors, personal (internal) factors, having no connectedness with God, egoism and oppression to self, fear and anxiety, bottlenecks, and monetary problems.

1.4.5 Stress outcomes:

Stress can make problems to people in many varied ways. In sudden occurrence of stress, all muscles contracted together, and when stress resolved, this tension would finish.

- Chronic stress keeps body muscles contracted for a long time in defensive and spasmodic state. When muscles are contracted for a long time, this can result in other physical reaction and even stress-related diseases such as Migraine headache, tension-type headache, musculoskeletal disorders. Stress results in difficulties in respiration.
- Acute stress such as, death of beloved keens, can actually end in an asthma attack in which airways between nose and lungs are obstructed. Moreover, stress can increase

frequency and speed of breathing (hyperpnoea) which leads to panic attack in predisposed individuals.

- Chronic stress, can make problems to heart and veins. Constant and continuous increase in heart rate and high levels of stress hormones as well as blood pressure, can deliver many problems to body.

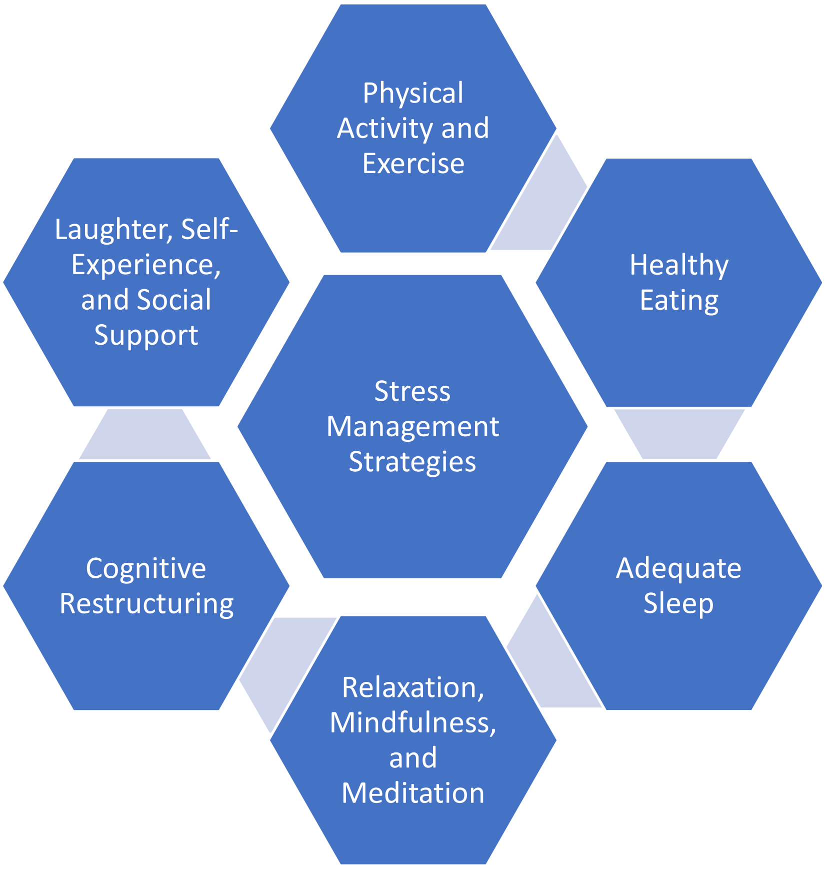
1.4.6 Stress and culture:

- ✓ In sociological definitions, culture is anything which in transmitted from a given generation to the next one without any intervention of genetic and heredity factors. The most important elements of any culture are its norms and values.
- ✓ The concept of culture comprises at least 14 principal components such as language, religion, cuisine, business practices, values, arts and aesthetics, codes of conduct, normative rules of action, and morals. With such theoretical and practical extent, almost every element of culture can (in)directly influence individual/social stress and result in increase and/or decrease of it.
- ✓ Recently, researchers are gradually put their emphasis on identification of factors which moderate individual and social stress influences, contextually.
- ✓ Today, most of researches of the social domain believe that culture is a fundamental context to form individual and environment, and thus, influential on stress increasing/decreasing interactions.
- ✓ One of the newly emerging domains in stress studies, is investigation of inter-culture differences in stress and its augmenter and diminisher factors. However, these efforts are not unified and mostly are descriptive, rather than having a theoretical consolidated construct. It shall be noted empirical findings reveal that culture acts as an inclusive context for stress and copings to it.

- ✓ The Cultural Stress Model presented a model which shows the current transactions between environmental system, and individual system, and their mutual impact on tertiary outcome situations, cognitive reappraisal and coping skills, and health, welfare, well-being and hygiene.

1.5. STRESS MANAGEMENT STRATEGIES:

Given the beneficial nature of mild to moderate levels of stress, the goal of stress management is not to eliminate all stress. Rather, stress management techniques are designed to keep stress levels within an optimal range. Engaging in healthy lifestyle behaviours can help to reduce stress and maximize the likelihood of living a long, healthy life. The following stress management techniques have been consistently supported by empirical research: physical activity and exercise; healthy eating; adequate sleep; relaxation, mindfulness and meditation; laughter, self-expression and social support; and cognitive restructuring.


Physical Activity and Exercise
Healthy Eating
Adequate Sleep
Relaxation, Mindfulness, and Meditation
Cognitive Restructuring
Laughter, Self-Experience, and Social Support
Stress Management Strategies

1.5.1. Physical Activity and Exercise:

- Considerable evidence has accumulated indicating that regular physical exercise is associated with numerous physical and psychological health benefits. For example, regular engagement in moderate exercise, such as a brisk walk, strengthens the immune system and decreases rates of illness.
- Exercise also strengthens body muscles, including the heart, preserves muscle mass, and helps with weight management. Individuals who exercise regularly are also at a reduced risk for some chronic diseases, such as diabetes and hypertension. Although exercise is, technically, a stressor itself, requiring the body to adapt to the demands of the activity, research suggests that regular physical exercise can help to reduce the body's reactivity to other stressors.
- In fact, several studies have demonstrated that individuals who exercise demonstrate lower physiological (e.g., blood pressure, heart rate) markers of stress and report less anxiety in response to a stressful situation than those who do not exercise.
- This finding is particularly important given that stressful events precede approximately 80 percent of major depressive episodes, and stress is a central risk factor for the development of panic attacks, generalized anxiety, posttraumatic stress, social anxiety, and phobias. Thus, involvement in regular exercise may help protect against or prevent the onset of anxiety and mood disturbances.

1.5.2. Healthy Eating:

- When experiencing high levels of stress, research suggests that many people change their eating patterns. One of the most common dietary changes associated with stress involves the increased consumption of caffeine in an effort to improve early morning or late-night productivity.

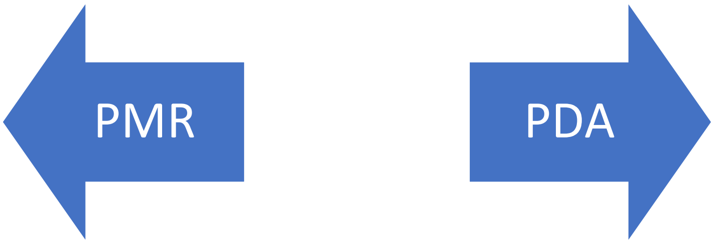
- Ironically, although caffeine is associated with short term increases in alertness, caffeine can also exacerbate the stress response. For example, caffeine stimulates the body to release various stress hormones, including cortisol and glucocorticoids, as well as catecholamines, which include epinephrine (adrenaline), norepinephrine, and dopamine. The release of these chemicals is associated with heightened levels of stress for hours after ingestion.
- In addition, caffeine consumption can lead to other conditions that can affect the body's ability to respond to stress, including insomnia, hypertension, increased risk of heart disease, gastrointestinal problems, and immune system suppression, making you more prone to infections.
- As noted earlier, high levels of stress are also associated with increases in cortisol, which tend to lead to cravings for high fat or sugary foods.
- In addition, when busy, people often resort to skipping meals or eating fast foods. These dietary changes can actually make it more difficult for our bodies to manage stress.
- Eating a healthy diet full of nutrient rich foods can help your mange stress in several ways. For example, complex carbohydrates, like oatmeal and whole grain breads and cereals, cause your brain to release Serotonin, a neurotransmitter associated with positive mood. A well-balanced diet improves one's ability to manage stress.

1.5.3. Adequate Sleep:

- Research suggests that the relationship between stress and sleep is bidirectional in that high levels of stress tend to be associated with impaired sleep, and lack of sleep tends to exacerbate the experience of stress.
- Numerous studies have indicated that excessive stress tends to lead to diminished ability to fall and stay asleep, increased rate of nightmares, and poorer sleep quality.

- In addition, various emotional disorders associated with stress and anxiety, such as posttraumatic stress disorder and generalized anxiety disorder, are often associated with significant sleep disruption.
- On the other hand, lack of sufficient sleep often leads to suboptimal physiological and psychological functioning. For example, sleep deprived individuals report higher levels of stress, anxiety and anger in response to even low-level psychological demands.
- Further, some evidence suggests that sleep deprivation affects cortisol (a stress hormone) levels, and neuroimaging studies indicate that sleep deprivation is associated with impaired neurological functions, including increased amygdala (part of the brain associated with emotional responses) reactivity and pre-frontal control regions of the brain.
- Epidemiological research suggests that most individuals require 7 to 8 hours of sleep nightly to obtain the maximum physiological and psychological benefits from sleep.

1.5.4. Relaxation, Mindfulness, and Meditation:



- Relaxation, or easing of physical or mental stress, is often thought to be the antidote to stress. Relaxation and anxiety are thought to be opposing emotions, in that one cannot be relaxed and anxious at the same time.

- Indeed, the achievement of a state of relaxation during a period of stress is often a challenging task. However, a variety of techniques have been devised with the intention of helping one to reach a state of relaxation, several of which have demonstrated reliable efficacy in psychological research: Diaphragmatic breathing, progressive muscle relaxation, guided imagery, and meditation exercises.
- Diaphragmatic breathing, or deep abdominal breathing, is a technique designed to slow one's breathing and regulate oxygen intake.
- Diaphragmatic breathing involves taking slow, deep breaths with the intention of expanding and contracting the diaphragm, which is a muscle separating the chest and abdominal cavities.
- Diaphragmatic breathing exercises involve sitting in a comfortable chair or lying down and taking slow, deep breaths with the intention of breathing so that the air expands the abdomen more than the chest.
- **Progressive muscle relaxation (PMR)** refers to a series of techniques that involves the repeated tensing and relaxing of various muscle groups in the body. Often, deep breathing is integrated, whereby an individual undergoes a deep breathing exercise while also tensing and relaxing muscle groups.
- The goal of PMR is to affect the autonomic arousal component of stress and anxiety via a reduction in skeletal muscle tension. It is believed that as skeletal muscle tension diminishes, other aspects of autonomic arousal, such as blood pressure and heart rate, also decrease.
- As part of the Personal Discovery Assessment (PDA) within this module, you will have the opportunity to experience PMR for yourself. Guided imagery, or visualization, refers to a type of relaxation training that involves the use of language to create calming, sensory rich experiences in one's imagination. Although guided

imagery techniques can vary widely, most involve guiding an individual toward places or situations in which they feel calm and comfortable, and individuals are encouraged to free their minds of any interfering thoughts or daily concerns.

1.5.5. Laughter, Self-Expression, and Social Support:

- It has long been said that, “laughter is the best medicine.” Indeed, we now know that laughter produces many positive physiological and psychological changes in the body. Research indicates that laughter increases oxygen intake and stimulates various muscles and organs, including the heart and lungs.
- Laughter also reduces blood pressure and blood sugar levels, increases blood flow, and improves energy levels. In addition, laughter causes the release of endorphins, which can increase pain tolerance and induce feelings of euphoria. Humour provides a psychological distance from the current state and enables us to replace our negative appraisals with more positive ones.
- In fact, some research suggests that laughter may be as effective as mild aerobic exercise or relaxation training at improving mood. Suppressing negative feelings can increase stress, and, in turn, be detrimental to one’s health.
- However, research suggests that expressing negative emotions in an adaptive and socially acceptable manner can serve to reduce stress and improve immune function.
- Talking about emotionally disturbing or traumatic events has also been shown to reduce anxiety, stress, and dysphoria. In fact, one of the most effective forms of psychological treatment for stress disorders involves intentionally recalling and talking about traumatic events repeatedly until the recollection of the event is less distressing.

- Much like humour, emotional disclosure allows an individual to step back and gain perspective on the stressful event and can transform how the individual views and makes sense of the situation.
- A strong social support system is also helpful when coping with stress. Research suggests that the strength of one's social support network is a predictor of health and is negatively associated with many mental health problems.
- In contrast, loneliness is associated with a variety of health problems, including high blood pressure, and lonely individuals have more stressful experiences and are more likely to assess situations as stressful.
- Researchers theorize that higher levels of perceived stress may explain the poorer health conditions of lonely individuals. Further, they have found that loneliness mediates the relationship between social support and health.
- Loneliness is best protected against with the quality, or closeness, of relationships over quantity, or number of relationships. Thus, effort should be put towards meaningful relationships rather than countless peripheral ones.

1.5.6. Cognitive Restructuring

- Cognitive restructuring involves learning to recognize the irrational or maladaptive thoughts we experience that contribute to negative mood states and then altering them to more accurately reflect the situation.
- It is important to select a rational alternative to substitute. A more rational alternative to the first assumption might be, "If I prepare well and know what I am going to say in advance, I will probably do a fine job of delivering the presentation." For the second statement, you might substitute, "most people will be anxious when they present, and even if they do notice my anxiety, they will probably be able to relate to it."

- Research suggests that cognitive restructuring or learning to recognize maladaptive thoughts and change them to reflect more adaptive, rational thought patterns can significantly improve mood, reduce stress, and decrease negative emotions.

1.6 PRESCRIPTION FOR STRESS MANAGEMENT:

To maximize your ability to cope with stress, try the following:

1. **Exercise Regularly.** Engage in 3-5 sessions of moderate intensity exercise each week to enhance your immune system and reduce your risk of developing anxiety and mood disorders. However, even if you cannot exercise regularly, remember that even a single episode of exercise can be a great way to relieve stress and improve mood.
2. **Eat a Healthy Diet.** Eat plenty of fruits, vegetables, whole grains, and fatty fish to maximize your physical health and your body’s ability to manage stress.
3. **Sleep.** Get 7-8 hours of uninterrupted sleep per night to improve your mood and boost your immune functioning.
4. **Practice Relaxation.** Engage in relaxation exercises on a regular basis or during periods of moderate to high stress. Progressive muscle relaxation (PMR), guided imagery, and meditation are great ways to reduce your overall level of arousal. Or, combine exercise with meditation or mindfulness by engaging in yoga two to three times per week!
5. **Express Yourself.** Look for the humour in stressful situations, and find ways to express your emotions through writing, art, or talking with friends and family.
6. **Reframe.** Attend to the ways in which you think about and interpret stressful situations and look for opportunities to reframe the situation in a more rational

or positive manner. Remember, the test at the end of this chapter is not something to be feared. Instead, it represents an opportunity for you to demonstrate how much you have learned about stress and stress management.

1.7. SIGNIFICANCE OF STUDY:

In today's highly competitive world, students face various academic problems including exam stress, disinterest in attending classes and inability to understand the subject. Academic stress is the feeling of anxiety or apprehension over one's performance in the academic activities. It can lead to students being unable to perform to the best of their abilities in examinations. At school there is a range of academic pressure feel, derived from a need for perfection, worry over grades, parental pressure, competition, sports or a tough class load. The nervous breakdowns, panic attacks, burnouts, and depression are also apparent in many younger students. The same situation is not always stressful for all people, and all people do not undergo the same feelings or off-putting thoughts when stressed. Stress is the mental state with can be tolerated tackled by individual themselves.

1.8 NEED OF THE STUDY:

Recent research shows that student is mostly affected by stress in their work environment. Many of the students reports in higher secondary school level. This stress can be objective and subjective so the researcher wants to study stress of higher secondary school students.

1.9 STATEMENT OF THE PROBLEM:

The research problem is stated as **A study on Stress Level of Higher Secondary School Students.**

1.10 OPERATIONAL DEFINITION:

Stress: Stress is defined as “A state of psychological and Physiological imbalance resulting from the disparity between situational demand and the individual ability and motivation to meet those needs”.

Higher Secondary School Students.: Those who are studying 11th 1nd 12th std in government, self-financing and Aided schools.

1.11 OBJECTIVES OF THE STUDY:

The present study aims at accomplishing the following objectives:

1. To find out the level of academic stress of higher secondary school students.
2. To find the relationship between level of Stress and sub samples.
3. To find the Predictor Stress of Higher Secondary School Students.
4. To find the dominant Stress found in Higher Secondary School Students.

1.12 HYPOTHESIS:

1. The stress levels of higher secondary school students are high.
2. There is no significant relationship between subsamples and stress level of higher secondary school students.
3. There is no predictor of stress level of higher secondary school students.
4. There is no dominant stress found among higher secondary school students.

1.13 METHODOLOGY:

In the present study, the investigator applied normative survey as a method. The normative survey method studies, describes and interprets what exists at present.

1.14 TOOLS USED:

Students’ Stress Rating Scale (SSRS) developed and standardized by **Balamurugan, M. And Kumaran, D. (2008)** have been used in this study. It is a seven-point scale with 35 items. The students were requested to give response based on the frequency of experiencing a particular stress against seven options given namely, 1) Everyday 2) Once in 2/3 days 3) Once in a week 4) Once in fortnight 5) Once in a month 6) Rarely and 7) Never. The items are given under five factors viz physiological, Emotional, Social, Examination and Behavioral stress. These factors comprised 11, 7, 7, 6 and 4 items respectively. The reliability and validity of the scale was 0.87 and 0.93 respectively.

1.15 POPULATION:

The students studying in Higher Secondary School situated in Cuddalore district and considered as population of the study. There are 144 schools in Cuddalore district approximately 45000 students.

1.16 SAMPLE:

The 203 higher secondary school children studied in 4 different schools situated in Cuddalore district will be consider as subject for the study.

1.17 STATISTCAL TECHNIQUES USED:

For the analysis of the data, the following statistical techniques have been used.

Descriptive analysis

1. Measure of central tendency (Mean)

2. Measure of variability (Standard Deviation)

Inferential analysis

1. ‘t’ test

2. ‘F’ test

Correlational Analysis, Factor Analysis and Regression analysis.

1.18 LIMITATIONS:

1. The study is limit only to higher secondary school students alone.

2. The study is conducted only in Cuddalore district.

3. Limited statistical techniques are used to analyze the data.

1.19 CHAPTERIZATION:

Chapter II contains a review of related literature. The Methodology is given which contains the description of tools, the sample selection and the statistical used in the study. Chapter Iv contains the analysis and interpretation of data. The important finding and discussion of the result, suggestions for the future work and given in Chapter V. Bibliography follows Chapter VI and the appendices contains tools follow the bibliography.

Chapter II

Review of Related Literature

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

A Literature review is a text of a scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature review are secondary sources, and do not report new or original experimental work. Most often associated with academic-oriented literature, such reviews are found in academic journals, and are not to be confused with book reviews that may also appear in the same publication. Literature reviews are a basis for research in nearly every academic field. A narrow-scope literature review may be included as part of a peer-reviewed journal article presenting new research, serving to situate the current study within the body of the relevant literature and to provide context for the reader. In such a case, the review usually precedes the methodology and results sections of the work.

Producing a literature review may also be part of graduate and post-graduate student work, including in the preparation of a thesis, dissertation or a journal article. Literature reviews are also common in a research proposal or prospectus (the document that is approved before a student formally begins a dissertation or thesis).

A literature review is an account of what has been published on a topic by accredited scholars and researchers. But more often it is part of the introduction to an essay, research report or thesis. In writing the literature review, your purpose is to convey to your reader what knowledge and ideas have been established on a topic, and what their strengths and weakness are. As a piece of writing, the literature review must be defined by a guiding concept (e.g., your research objective, the problem or issue you are discussing or your argumentative thesis). It is not just a descriptive list of the material available or a set of summaries. Besides enlarging your knowledge about the topic, writing a literature review lets you gain and demonstrate skills in two areas.

1. Information seeking: the ability to scan the literature efficiently, using manual are computerized methods, to identify a set of useful articles and books.
2. Critical appraisal: the ability to apply principles of analysis to identify unbiased and valid studies.

A literature review must do these things

1. Be organized around and related directly to the thesis or research question you are developing.
2. Synthesize results into a summary of what is and is not known.
3. Identify areas of controversy in the literature.
4. Formulate questions that need further research.

A literature review has four main objectives:

- It surveys the literature in your chosen area of study.
- It synthesizes than information in that literature into a summary.
- It critically analyses the information gathered by identifying gaps in current knowledge;

By showing limitation of theories and points of view; and by formulating areas for further research and reviewing areas of controversy

- It presents the literature in an organized way

A literature review shows your readers that you have an in -depth grasp of your subject and that you understand where your own research fits into and adds to an existing body of agreed knowledge.

2.2 Review of related literature:

Michaela,P., Sarah,H., & Alexandra,P. (2019). Students in secondary and tertiary education settings face a wide range of ongoing stressors related to academic demands. Previous research indicates that academic-related stress can reduce academic achievement, decrease motivation and increase the risk of school dropout. The longer-term impacts, which include reduced likelihood of sustainable employment, cost Governments billions of dollars each year. This narrative review presents the most recent research concerning the impact of academic-related stress, including discussion of the impact on students' learning capacity and academic performance, mental health problems, such as depression and anxiety, sleep disturbances and substance use.

Camille Gay,D., Samantha,J.M., Trisha,K.M., & Jerald,C.M. (2019). Stress is something that causes anxiety or depression, it comes from schooling, church, or even at home. It is the reaction of one's body and mind to something that causes a change in the balance. Although senior high school students may encounter common stressors in secondary level, perceptions of what are considered as academic stressors may differ.

The study is entitled; "Stress Levels of Senior High School Students in Practical Research 2." This study was in a quantitative design. This study aimed to know the level of stress experienced by senior high school students in Practical Research 2. For the purpose of the study, all grade-12 students in Jagobiao National High School are required to answer the questionnaires in rating scale form.

Results indicates that causes of these stress levels is correlated with the three categories the researchers created— gender, strand and economic status of students. It can be inferred that there is a significant association of stress levels between gender and the content of students. It was also found that there is no significant association of stress levels between gender and the skills and attitude of students. Moreover, there is no significant association of stress when students are categorized according to strand by content, skills/performance and attitude. Lastly, with regards to economic status, content and attitude was found to be significant among students. However, skills have no significant association with economic status of students. Confounding factors, such as sample size, are addressed. Suggestions for the future research are provided.

Yashwant,K.N., & Usha,S. (2018). The current study aimed to provide insight into the role of academic stress among young adults, their emotional adjustment and coping mechanism. Over a period of time, academic stress among students has increased drastically due to parental expectation and competitive environment among students. This has resulted in having harmful effect to the individual, parents, society and nation at large. Numerous studies have stated that alarming number of students are not able to cope due to heavy syllabus, parents' expectation and cut throat competition among students leading them to mental health issues like depression, anxiety and suicide. These facts require immediate attention; hence, awareness among students, parents and teachers should be created so that preventive measures can be taken to create a friendly and, healthy environment. In order to overcome such issues the counsellors and health professionals must take initiative to create awareness among the parents and teachers about their role in fostering a healthy environment. Thus, to save youth from such vulnerable behaviours they should be directed towards creative and constructive activities to enhance their capabilities, interests, aptitudes and encourage them to achieve their goals.

Sathiya,V., & Malathi,V. (2018). The present study is an attempt to analyse the academic stress of young people that comes from their education during their schooling. There is also lot of stress to be seen in college students as well for pursuing one's education. Students are facing many challenges to optimal their academic performance as they have lot to study and face their exams. Students finds it difficult to balance their time, doing all their work and also finding some time to do their extracurricular activities. Academic stress is a burdensome mainly on school students which tends to adversely impact the mental and physical wellbeing of the students as it will drastically reduce their academic performance. This study focuses on the academic stress of higher secondary school students in Coimbatore District. To study the academic stress of higher secondary students, the analyst endorsed survey method. A sample of 200 higher secondary schools from 17 schools in and around Coimbatore district, TAMILNADU were considered for study using simple random sampling technique. The findings unveiled that there is no substantial difference between academic stress with locality of school, Gender, medium, type of family and type of management among higher secondary school students. The students should manage their academic work effectively, attend class regularly, getting enough sleep and scheduling enough time to study to increase their academic score.

Khabirul,A., & Ujjwal,K.H. (2018). The present study was conducted to explore difference in academic stress and academic performance among the higher secondary students with respect to their gender and to estimate the relation between academic stress and academic performance of the students of class XI of Bengali medium higher secondary schools affiliated to the West Bengal Council of Higher Secondary Education in MALDA District, West Bengal. The researchers adopted the Academic Stress Scale consisted of forty items developed by Kim (1970) and adopted by Rajendran and Kaliappan (1990) and Rao (2012) and the scores obtained by the students in Madhyamik Examination were taken for the study. The researchers applied the Pearson Product Moment Method to find out the said relation and t-tests to find out the difference among the sub-samples. The present study found that there is a significant difference in academic stress and also revealed that there is a significant difference in academic performance due to the gender of the students of class XI.

The present study explored negative correlation between the academic stress and academic performance of the students.

Antony,P. (2018). The present study deals with the analyses of examination stress and academic achievement among higher secondary students studying in different systems, namely, state, matriculation and the central board schools at the secondary level. They are both dependent variable and independent variable which is related to the sub – variables (Gender, type of management, medium of instruction, type of schools, type of family, parent qualification, parent income, parent occupation). The research tools used for the data collection, nature and selection of the sample, pilot study, establishing reliability and validity of the tools, a brief description of the procedure adopted for the data collection, scoring, statistical technique to be employed for the further analysis of the data. The Higher Secondary Students constitute the population of the present study. In the study a sample of 150 students from class plus one was selected randomly from the city of Chennai. The sample includes Government School, Government Aided and Unaided Higher Secondary Schools. To test the hypotheses framed, the following tools have been used. Examination stress scale by Dr.K.Saraladevi. There is no significant difference in the examination stress among higher secondary school student based on type of management. There is no significant difference in the examination stress among higher secondary school student based on age. It was found that the calculated 'F' value (2.197) is greater than the table value(2.66) Hence There is no significant difference in the examination stress among higher secondary school student based on age. It was found that the calculated 'F, value (0.049) is less than the table value (2.66) Hence There is no significant difference in the examination stress among higher secondary school student based on type of management.

Showket,A.W., Dinesh,N., & Aijaz,A.B. (2018). Stress is viewed as a negative emotional, cognitive, behavioural and physiological process that occurs as a person tries to adjust to or deal with stressors. Academic stress refers to the unpleasant psychological situations that occur due to the educational expectations from parents, teachers, peers and family members. Academic achievement is the outcome of education, the extent to which a student, teacher or institution has achieved their educational goals. Academic achievement is commonly measured by examinations or continues assessment. There is great impact of Academic Stress on Academic Achievement. In This Paper we will discuss the review of literature of Academic Stress impacted on Academic Achievement of students. The main aim of the present study was to examine, provide the Knowledge regarding the impact of academic stress on academic achievement and provide recommendation for its further studies.

Akeela,P., & Ashok,H. (2018). The purpose of the present study was to measure the level of academic stress among high school students of Government, and Private schools and to compare the degree of stress among boys and girls. The sample consisted of 144 students each from Government, and Private school, purposive sampling technique was used to collect the data. The sample were administered Academic stress scale developed by Rajendran and Kaliappan. The descriptive statistics and ‘t’ test was used to verify the hypothesis. The findings reveal that nature of school emerged as a significant factor in the experience of stress. Students belonging to Government schools were experiencing more stress. Further, the study revealed that there is no gender difference in the experience of stress.

Mussarat Jabeen,K. (2018). Current study explored the effect of academic stress on students’ performance and the impact of demographic variables like gender, age and educational level. A sample of one hundred and fifty students was taken from different universities located in Islamabad. Seventy- five respondents were males and the remaining seventy-five were females. The results showed significant effect of academic stress on student’s performance. There was a non-significant difference between male and female university students on scores on the Perceived Stress Scale (PSS). A significant difference between junior and senior students was found on the PSS. Academic stress was found to be higher in younger students than older students. There was a non-significant difference on PSS scores among students when stress was measured at the beginning and at the end of the semester.

Kala,C. (2018). Students at higher secondary level start to become responsible for their own life decisions and lifestyle. The most common problem faced by students while adapting to new learning environment and coping up with academic demands are depression, anxiety or stress. The newly introduced entrance exams for professional courses increase the risk of psychiatric morbidity among students. The present study was done with 251 student sample and 119 teacher sample to identify the factors that the cause stress among them. Statistical tools like Percentage analysis, bar diagram and chi-square test are used. The results concluded that both gender preferred familyenvironmental factors as a cause for their stress. Teachers are of the opinion that exam pressure, time management and behaviour of students are the major factors that create an increase in stress level.

Radhika,K. (2018). Education is considered imperative for not only the progress of the individuals, but also for the development of community and nation. In order to bring about improvements in all aspects, and utilize modern and innovative techniques and methods, individuals need to generate awareness and enhance their educational skills. The main purpose of this research paper is to understand the factors that influence the academic performance of the students in secondary schools in India. In secondary schools, there are numerous factors within school and outside school that influence the academic performance of the students. The main areas that have been taken into account include, factors influencing the academic performance of the students, academic performance and large number of students in class, parental and associated factors relating to academic achievement, contribution of school factors towards the academic performance of students, influence of poverty on academic achievement of students and other causes of low academic achievement.

Geeta Jain,M.S. (2018). Stress is definitely a big word with even bigger impact; however this can be dealt with small changes that we bring in our day to day life. Stress is experienced by managers, financers, government officials, administrators, politicians, house wives and is most prevalent amongst students nowadays. It is essential to identify the cause of the stress so that it can be addressed meticulously and efficient interventions can be outlined. Stress is always seen as subjective process and encompasses individual's personal analysis and counter to a threatening event. Stress can result in depression, anxiety and many other hazardous conditions. The rise in the number of workshops being conducted for Stress Management, various articles being published, research reports etc. is an implication of the escalation of stress related cases in the past few decades. This study deals with the conceptual framework of the stress, causes of stress amongst students and the ways to manage stress. It also presents review of literature on the topic.

Subramani,C. (2017). Stress becomes an integral part of human life. Anything that creates a challenge or a threat to our comfort is a stress. All kind of stress is not considered to be bad because it helps people to perform well. In academics, stress is unavoidable among students, and it influences students' performance in all academic activities. Academic stress plays a major role in determining the mental health of students. This study was conducted to explore the academic stress and its relationship with mental health among high school students. 200 high school students from Government and Private schools in and around Salem city, TAMILNADU were selected through stratified random sampling and the data was collected with Educational Stress Scale for Adolescents and Positive Mental Health Scale. The results revealed that students from private school experienced higher academic stress than that of government school students, and private school students have higher mental health status than their counterpart. It was also found that academic stress had a significant relationship with the mental health of high school students. The implications of this are presented in this article.

Snehlata,D.G.,(2017). An attempt was made in this paper to review the literature on academic stress among the secondary school students and present the causes and symptoms of stress as well as coping mechanism for stress. The review of literature indicates that the reasons for stress during adolescence are because of disturbed family dynamics, peer pressure, inability to cope with studies, drug abuse, lack of competence. The involvement of adolescents in getting instant gratification of needs has led to lot of stress in them and in their relationships with family and peers. The students coming from joint families have slightly higher mean of academic anxiety score than their counterparts coming from nuclear families but this difference is not significant statistically. IQ and demographic factors are not key factor in academic stress among high school students. In order to overcome deviant behaviours, the parents play a constructive role in channelizing energies of the adolescents. Proper care should to be taken in helping to take the right decisions which may affect their future. Anxiety reduction and time management in conjunction with leisure activities may be an effective strategy for reducing academic stress in college students. Students should have the aspiration/expectation about their study, not beyond their capacities and abilities, Students need also proper counselling while selecting their courses at intermediate level. The parents should also consider the child’s interest and aptitude and not impose on selecting the courses. The family environment should be congenial and the learning process should be made pleasurable and parents should avoid making it as a stressful event for adolescents. Author concludes that supportive and stimulating atmosphere is very necessary for the student to progress in their academic life and for reaching their aim or goal.

Pratibha,S. & Bijender,S. (2017). Academic stress is a main source of stress for many students. The study examines the level of academic stress among higher secondary school students. Descriptive research design was adopted and stratified random sampling was chosen for study. A total sample of 180 students participated in this study were obtained from 10 higher secondary schools at Bareilly district. The data were collected though self-constructed. Academic Stress Scale. Data were analysed with the help of t-test and analysis of variance (ANOVA). The study revealed that there exists high significant difference between the academic stress of male and female participants of higher secondary school students, but no significant difference was found among academic stress of arts, science and commerce stream students. It was also found that there was no significant difference between academic stress of government aided & self-finance school students and rural & urban area school students.

Sathish,K., & Brogen,S.A.(2017). Adolescence is a stressful period due to physical, psychological, sexual changes, and the presence of psychiatric disorders such as depression, anxiety, and stress at this stage of life is a matter of concern. Objectives: The objectives of the study were to determine the prevalence of depression, anxiety, and stress among higher secondary school students of Imphal and to determine the association between depression, anxiety, and stress and selected variables such as gender, standard, and religion. Materials and methods: From September 2014 to October 2014, a cross-sectional study was conducted among higher secondary school students of Imphal. The sample size was calculated to be 750. Seven schools were randomly selected, and all the students in that school were enrolled in the study. The study tool used was a questionnaire containing DASS (Depression Anxiety Stress Scale) and sociodemographic characteristics. Results: The prevalence of depression, anxiety, and stress among 830 valid respondents were 19.5%, 24.4%, and 21.1%, respectively. In total, 81.6% of the respondents had at least one of the studied disorders and

34.7% of the respondents had all the three negative states. The prevalence of depression, anxiety, and stress were high among females and were significant for anxiety (P = 0.00) and stress (P = 0.04). The prevalence of depression and stress were significantly higher among 12th standard students with P-values of 0.00 and 0.02. Conclusion: The prevalence of depression, anxiety, and stress were high with anxiety and stress significantly higher among females, whereas prevalence of depression and stress were significantly higher among 12th standard students. More studies are recommended to determine the factors leading to these mental disorders.

Gouri,S. & Deepak,P. (2017) Psychological disorders like anxiety, depression and stress significantly exacerbate the pressure on students to perform better. The factors collectively hamper their performance leading to low academic achievement. In Chhattisgarh state few studies have looked especially in the field of mental health and academic achievement of the students in last decades. This study aimed to fill that gap and find out the relationship among anxiety, stress, depression and academic achievements. For this purpose 120 (60 boys & 60 girls) students of 11th standard studying in government schools located in rural area of MAHASAMUND district of Chhattisgarh state were taken randomly. The ADSS (anxiety, depression and stress scale) was used to measure the anxiety, depression and stress among students. To analysis data Correlational research design will be used. Hierarchical multiple regression analysis revealed significant negative association between depression and, anxiety for criterion variable academic achievement. Furthermore, stress and academic achievement found to be significant positive association with each other. It is concluded that mental health condition of the students affects academic achievements.

Jamuna,R. (2017). The present life is full of stress and strain due to rapid advancement and competition among adolescent stress is a part of today living. Even students are not free from stress, they also feel stressed while meeting academic demands, adjustment to view living environment and facing the cut throat competition. Mild form of stress can work as a motivator but when the level of stress is too high it creates problems and obstacles in the life of an individual. Stress is the force behind much learning. Students under the pressure of a final examination may be motivated to pick up the book, burn the midnight oil and cram. As a result, they may find that not only has he to pass the test, but also learn a bit of the subject while his more carefree classmate, not stressed enough to study, may find his academic career prematurely terminated as a result of flunking the examinations. Stress is a universal phenomenon. This research work focuses on identifying the sources of stress and assessing the impact of stress among school students writing board exam. A random sample of 150 students from the population of Chennai city is selected. Total 100 students responded and filled the questionnaire. The findings reveal that there is no significant difference between gender and stress. It was found that studying all night before exam and Irrational thoughts about exams and their outcomes are the main sources of stress. Falling asleep or staying asleep and Muscle tension, especially in neck, back and jaw is the major impact of stress on the students.

Rey,S.G., & Romel,A.C. (2017). This study aims to determine the stress coping mechanism and its impact to their age among Senior High School students at Paranaque National High School–Baclaran. This uses survey questionnaires that were distributed to the 104 Senior High School students. In addition, this study wants to know if there is a significant relationship between the indicators namely: Use of Instrumental Social Support, Mental Disengagement, Use of Emotional Social Support, Planning and Active Coping pertaining to age of the respondents. The statistical treatments that were used in this study are Pearson r Coefficient Correlation and T-test. This study used “The Transactional Model of Stress and Coping” by Lazarus and Folkman (1984). It is a basis for evaluating the processes of coping with stressful events. Indicator Planning has the highest impact to the respondents.

As to the data gathered and interpreted by the researchers through T-test, all of the indicators have relationship with the respondents' demographic profile in terms of age. While in Pearson r, all the indicators have a significant relationship with the age the respondents have.

Jayasankara,R., Karishma,M., & Anjana,T. (2017). Any individual who progresses through life goes through various changes and transitions where „stress" becomes invariably part of the journey. Adolescents are particularly vulnerable to the concept of academic stress as the transitions occur at an individual and social level. It, therefore, becomes imperative to understand the sources and impact of academic stress to derive adequate and efficient intervention strategies. This review aims to understand academic stress at a bio psychosocial level highlighting the impact and sources of academic stress. For the literature review, articles were collected from online databases such as EBSCO, ProQuest, Springer, PubMed, Jstor and Google Scholar. The literature search was done using keywords academic stress, academic anxiety, coping, physiological reactions of stress, academic performance, stress and mental health. This prevalence rate of stress varied from 15%-45% in studies conducted after 2000. The review examines stress and its physiological impact, cognitive and social influences, sources of stress detailing Indian findings.

Smritikana,M.G. (2016). The data have been analysed according to objectives and hypotheses of the research. It was observed that students in private schools have more academic stress than their counterparts in government schools. Female students experienced higher academic stress than male students. Senthil kumaran, Amreena Javid, (2016). Abstract The transformation of global education sector gave raise to stringent testing procedures on students. Since high stakes testing is the solitary routine to identify effective students in the present education system, test anxiety is shown to be an obvious company for the students in the research literature. Students' community is in a challenging and stressful phase where aspirations are being spelt out to ensure them a place in the job market. The question lies on how the students can manage their test anxiety and academic stress using the well reconnoitered strength called emotional intelligence. To find the answer, this study aimed at exploring the emotional intelligence among university students of India, in relation to their test anxiety and academic stress. For this purpose, a sample of 200 students in the age range of 18 to 23 years with no history of clinically significant anxiety/ stress was taken. The study adopted survey research design using Emotional Intelligence scale by Schutte et al (1997), Fried-Ben Test Anxiety Scale by Friedman & Bendas Jacob (1997) and Student Academic Stress Scale (SASS) by Busari (2011). The objectives are (i) to study the differences in emotional intelligence, test anxiety and academic stress of students on the basis of their gender, (ii) to study the differences in emotional intelligence, test anxiety and academic stress of students on the basis of their course of study and (iii) to study the relationship among emotional intelligence, test anxiety and academic stress of students. The results revealed significant differences in the study variables on the basis of students' gender and course of study. Further, it is discussed on how training programmes may be devised to equip the emotional intelligence of students for their better performance in exams via managing their test anxiety and academic stress.

Suresh Prabu,P.(2015). Stress can exist when working at a fast place, doing difficult problems, or listening to someone shout at you. It can be brought about through conflicts, making decisions, or otherwise straining abilities, or it can exist because of numerous social demands on time. We have noted that emotional states tend not to be long lasting, whether they are unpleasant emotions like fear, or pleasant ones, such as joy. Yet on occasion such states may persist for long periods of time, or they may reach excessively high levels. When this happens, the result typically is labeled \"stress\", and its manifestated in psychological as well as physiological terms. Stress and its manifestations, such as anxiety, depression, and burnout, have always were as a common problem among people in different professions and occupations. In the last few decades, alarm has already been provoked by the proliferation of books, research reports, popular articles and the growing number of organized workshops, aiming to teach people how to cope with this phenomenon. The purpose of the study is to find out the level of academic stress among higher secondary students. The present study consists of 250 XI standard students studying in higher secondary schools situated in NAMMAKKAL District of Tamil Nadu, India. The sample was selected by using simple random sampling technique. The present study reveals that the higher secondary students are having moderate level of academic stress and irrespective of sub samples of the higher secondary students are having moderate level of academic stress. The male student\'s academic stress is higher than female students. The urban student\'s academic stress is higher than rural student. The Government school student\'s academic stress is less than private school student. The science subject student\'s academic stress is higher than arts student. The students whose parent\'s education as literate level academic stress is higher than their counter part.

Sibnath,D., Esben,S., & Jiandong,S. (2015). This work investigates the academic stress and mental health of Indian high school students and the associations between various psychosocial factors and academic stress. A total of 190 students from grades 11 and 12 (mean age: 16.72 years) from three government-aided and three private schools in Kolkata India were surveyed in the study. Data collection involved using a specially designed structured questionnaire as well as the General Health Questionnaire. Nearly two-thirds (63.5%) of the students reported stress due to academic pressure – with no significant differences across gender, age, grade, and several other personal factors. About two-thirds (66%) of the students reported feeling pressure from their parents for better academic performance. The degree of parental pressure experienced differed significantly across the educational levels of the parents, mother’s occupation, number of private tutors, and academic performance. In particular, children of fathers possessing a lower education level (non-graduates) were found to be more likely to perceive pressure for better academic performance. About one-thirds (32.6%) of the students were symptomatic of psychiatric caseness and 81.6% reported examination-related anxiety. Academic stress was positively correlated with parental pressure and psychiatric problems, while examination-related anxiety also was positively related to psychiatric problems. Academic stress is a serious issue which affects nearly two thirds of senior high school students in Kolkata. Potential methods for combating the challenges of academic pressure are suggested.

Leonard, N. R., Gwadz, M. V., Ritchie, A., Linck, J.L., Cleland, C. M., Elliott, & Grethel, M. (2015). There is growing awareness that students' experiences of stress may impede academic success, compromise mental health, and promote substance use. We examined these factors in an under-studied population, private/independent high school students, using a multi-method (qualitative and quantitative), iterative data collection and analytic process. We first conducted qualitative interviews with faculty and staff at a number of highly competitive private schools, followed by an anonymous quantitative survey with 128 11th grade students from two of these settings. We then conducted a qualitative exploration of the quantitative results with a subset of students. Next, a set of Expert Panel members participated in qualitative interviews to reflect on and interpret study findings. Overall, we found students experienced high levels of chronic stress, particularly in relation to academic performance and the college admissions process. While students described a range of effective, adaptive coping strategies, they also commonly internalized these serious pressures and turned to alcohol and drugs to cope with chronic stress, although not typically at problematic levels. We discuss study implications for both schools and families derived from the Expert Panel.

Kirti,M., & Madhurima,P. (2015). Stress is a normal phenomenon in everyone’s life. It is a state of an individual under exhausting circumstances in different areas of life, i.e.

family, school, health, business organization etc. Students specially of senior secondary classes have to undergo the experiences of stress due to the pressure of studies, expectations of parents, teachers, and self, peer pressure, career demands resulting a lot of burden on delicate minds. Therefore, it is necessary to understand the causes of academic stress among students; to point out their resources to combat it and thereby enhance their well- being. Numerous variables have been identified to be positively or negatively associated with academic stress of students by empirical researches. Present paper is an attempt to review the studies from 1991 to 2014 related to psychosocial factors of academic stress among students specially the adolescents. From positive psychological perspective, self-efficacy, hope and perceived parenting were considered most relevant variables among others to influence academic stress of students. The review process included research journals, articles, books, dissertations, abstracts, encyclopaedia, theses and internet surfing.

Zamirullah Khan,A.B.L. (2015). This study aimed at the level of stress in male and female school students. For the purpose of the study the researcher randomly selected 64 school students aged between 14-18 years. To collect the data researcher used students stress scale (SSS) developed by Dr. Zaki Akhtar (2011). During collection of data researcher used means and method fit for this scale. The result of the study showed boys having much more stress in comparison to girls. The study concluded that school boys are more stressful than school girls.

Bhaskar,K.W., Jugal,K., & Charu,K. (2015). In the present scenario, as the society is influenced by modernization and westernization, the path from adolescence to adulthood is endowed with stress. This is true, especially in the case of adolescents in the mid income group families as they have to face greater stress in the form of parental ambitions and highly competitive academic environments. The objective of the current study is to assess the prevalence of stress and stress causing factors among school adolescents of Delhi.***Methods:*** It is a cross-sectional study, conducted among the adolescents of conveniently selected secondary schools from the central and eastern district of Delhi, India. Sampling technique used in the study was simple random sampling and calculated sample size. The study was conducted from January 2012 to March 2013. A pretested self-administered questionnaire was used for the data collection. Analysis was done using percentage, chi-square test.

Akande,J.A., Olowonirejuaro,A.O., & Okwara-Kalu,C.E,(2014). This study investigated level and sources of stress among secondary school students in the Federal Capital Territory (FCT) Abuja. The study was a descriptive survey and the population comprised all senior secondary school students in the FCT. A sample of 18 secondary schools out of the 59 public senior secondary schools in the FCT was involved in the study with a total of 540 respondents made up of male and female students. A questionnaire was designed by the researchers and validated through expert judgment to collect relevant data. The data collected were analysed using percentage, statistical weighted mean and standard deviations for the research questions while t-test was used to test the hypotheses. The results indicated that secondary school students had a medium level of stress and some of the significant sources of stress include: academic, intra-personal and environmental. There was a significant gender difference in the level of stress and also some sources of stress among secondary school students. It was recommended that the guidance and counselling unit of secondary schools should identify students with stress and provide adequate support and management strategies.

Vera,W. (2014). Burnout among adults in professional situations is well-known and widely Described (Maslach, Schaufeli & Leiter 2001). According to Schauffeli et al. (2002) burnout syndrome is also found among university students. More recently, burnout has also been identified in high school student populations. The aim of this study is to explore current research concerning school-related burnout among high school students. Sixteen studies concerning school-related burnout and academic stress among high school students were reviewed. The review of these publications has highlighted a number of risk factors and mental health consequences concerning burnout in an adolescent population. Gaps regarding research in this field have also emerged, in particular the need for screening scales and repercussions on mental health. Implications for future studies include developing prevention with attention to feelings of self-efficacy and solution-oriented coping.

Affum-Osei,E. (2014). This study finds out the profile and the relationship between Senior High School Students' perceived stress and academic performance. A total of 120 Senior High School Students randomly selected from four Senior High Schools in the Western Region of Ghana participated in the study. The instruments used for the research were the Students-Life Stress Inventory (SSI) by Gadzella (1991) and Mathematics Achievement Test adopted from the West African Examination Council (W.A.E.C). Data gathered from these instruments were analysed using Percentages and Pearson Product Moment Correlation Coefficient. Results showed that, majority of the students experienced moderate stress levels and that, none of the students experienced high stress levels. The study also indicated that, there is no significant correlation between the level of perceived stress and academic performance of the students. The results further showed that, schools in the urban areas performed better on the achievement test compared to schools in the rural areas. The research has provided insights for stakeholders in education to provide the necessary structures to help students manage stress in order to improve their academic performance.

Nikitha,S., Tessy, T.J., & Blessy, P.V. (2014). This study identified the academic stress and self - esteem among higher secondary school students in selected private schools of Udupi district. It also found out the existing correlation between academic stress and self-esteem. Academic stress rating scale, constructed by the researcher and Rosenberg self-esteem scale were used for the data collection. Questionnaires were completed by 96 first year higher secondary students of science batch. Academic stress rating scale was a four points scale which includes 32 statements regarding examination stress, stress from peers, intrapersonal stress, study habit and time management. The study found that 80.20% students have moderate stress, 13.5% have mild stress and 6.2% have severe stress. Among the subjects 82.30% were having normal self - esteem and 6.2% were having low self- esteem. Significant but low negative relationship is found between academic stress and self-esteem.

Esben Strodl,J.S.D. (2014). The purpose of this paper is to examine the prevalence of academic stress and exam anxiety among private secondary school students in India as well as the associations with socio-economic and study-related factors. Design/methodology/approach - Participants were 400 adolescent students (52 percent male) from five private secondary schools in Kolkata who were studying in grades 10 and 12. Participants were selected using a multi-stage sampling technique and were assessed using a study-specific questionnaire. Findings - Findings revealed that 35 and 37 percent reported high or very high levels of academic stress and exam anxiety respectively. All students reported high levels of academic stress, but those who had lower grades reported higher levels of stress than those with higher grades. Students who engaged in extra - curricula activities were more likely to report exam anxiety than those who did not engage in extra - curricula activities. Practical implications - Private high school students in India report high levels of academic stress and exam anxiety. As such there is a need to develop effective interventions to help these students better manage their stress and anxiety. Originality/value - This is the first study the authors are aware of that explores the academic stress levels of private secondary school students in India. The study identifies factors that may be associated with the experience of high levels of stress that need to be explored further in future research.

Menaga,S., & Chandrasekaran,V. (2014). The purpose of the present study was to reduce the Academic Stress of higher secondary students and find out the differences if any in terms of Gender, Type of Family, Type of School Management, Family Income and Stream of Study. The samples for the study comprised of 250 higher secondary school students in THIRUVANNAMALAI District. Survey method was adopted and simple random sampling technique was used to carry out the present research. The investigator has used descriptive and differential statistical methods for analysing the collected data. It was found that there is significant difference in the Academic Stress of higher secondary students in relation to their Gender, Type of Family, Type of School Management and further there is no significant difference in the Academic Stress of higher secondary students in relation to their Family Income and Stream of Study. The findings could be useful for the students to know their level of stress and they can take up necessary and sufficient practices to reduce their Academic Stress.

Kartiki,P., & Ravindra,K. (2014). The main objective of the present study is to examine the academic stress among senior secondary students. The total participants of the study were 30 (15 male and 15 female). All students belong to 12th standard studying in Noida. The Data was collected through standardized Academic Stress Questionnaire (ASQ) by Akram, Mohd Ilyas Khan and Sahiba Baby. Mean, Standard deviation and T-test were conducted for analysis of data. Result indicates that there is significant difference among boys and girls in relation to academic stress. Result revealed that senior secondary boys have higher academic stress in compare to girls.

Affum-Osei,E., Asante Eric,A.,& Forkuoh,K.S. (2014). This study finds out the profile and the relationship between Senior High School Students' perceived stress and academic performance. A total of 120 Senior High School Students randomly selected from four Senior High Schools in the Western Region of Ghana participated in the study. The instruments used for the research were the Students-Life Stress Inventory (SSI) by Gadzella (1991) and Mathematics Achievement Test adopted from the West African Examination

Council (W.A.E.C). Data gathered from these instruments were analysed using Percentages and Pearson Product Moment Correlation Coefficient. Results showed that, majority of the students experienced moderate stress levels and that, none of the students experienced high stress levels. The study also indicated that, there is no significant correlation between the level of perceived stress and academic performance of the students. The results further showed that, schools in the urban areas performed better on the achievement test compared to schools in the rural areas. The research has provided insights for stakeholders in education to provide the necessary structures to help students manage stress in order to improve their academic performance.

Rajni,K., & Radhakanta,G. (2012). The study investigated the relationship between stress and academic achievement of senior secondary school students. A total of 120 senior secondary school students randomly selected from six senior secondary schools of North-western Delhi participated in the study. Three null hypotheses were tested using data generated from research instruments. The instrument included Stress Inventory designed and standardized by Dr. Suman Nangia (1990). Academic achievement was taken from the students' previous examinations. Data generated from these instruments were correlated using Pearson product moment correlation method. Results showed a positive correlation between stress and academic achievement. Significant difference exists in the academic achievement of students having high, moderate and less stress. Students with high and moderate stress performed better than the students having less stress. Further it was also found that stress and academic achievement are not mediated by gender.

Santhosh kumar,N., Sujatha,S., & Jahira,P. (2011). The purpose of this study is to determine the relationships between stress level and academic achievement among students in rural secondary schools. A study of stress, especially an approach towards measuring level of stress among adolescents is quite new in Tamil Nadu. So, an attempt to study this condition, starting with normal adolescents, is the purpose of this study.

Muhamad,S.B.Y. (2010). In the process of growing, adolescents experience stress either good or bad depending on how they cope. School training further adds to this stressful situation. It is noteworthy that persistent over stress will impair students' academic achievement, personal and professional development. This preliminary study is meant to obtain initial data on the stress prevalence, stressors, and coping strategies among secondary school children in Malaysia. Data gained from this preliminary study provides valuable data for subsequence research in the future. Methods: This is a cross-sectional study involving 100 secondary school students from a Malaysian government secondary school. The validated Malay version 12-item General Health Questionnaire (GHQ-12), Soalselidik Stressor Sekolah Menengah (SSSM) and Malay version of Brief COPE were used to identify stress level, stressors, and coping strategies. Results: A number of 90 (90%) students participated in this study. The prevalence of stress among secondary school students was 26.1%. It was found that the main stressors were related to academic. The top five coping strategies were religion, positive reinterpretation, active coping, planning, and use of instrumental support. Conclusion: The prevalence of stress among secondary school students in a Malaysian government school was high. Academic related problems were the major stressor among the students. The most frequent coping strategies being used by the students were positive coping strategies.

Rizzolo,D., Zipp., Genevieve.P., Stiskal., Doreen., Simpkins., & Susan. (2009). Health science programs can be demanding and difficult for many students, leading to high levels of stress. High levels of stress can have a negative effect on students and subsequently the practicing clinician. Research suggests that yoga, humour, and reading are simple, effective methods to help reduce stress. To date no research compares the acute effects of yoga, humour, and reading in doctor of physical therapy and masters of occupational therapy students. Additionally, it is undetermined if one technique is more effective than the other in reducing stress. Purpose: The purpose of this study was to compare the immediate effects of yoga, humour, and reading on acute stress in students enrolled in doctor of physical therapy and masters of occupational therapy programs. It was hypothesized that following a 30-minute yoga, humour, and reading intervention session, students would demonstrate a reduction of stress on the Daily Stress Inventory (DSI) and a decrease in blood pressure and heart rate. Subjects: Twenty-two students from the School of Graduate Medical Education Doctor of Physical Therapy (DPT) program (n=14) and Masters of Science in Occupational Therapy (OT) program (n=8) volunteered to participate in the study. Methods: At baseline subjects completed a demographic survey. All subjects participated in a yoga, humour, and reading intervention session, once a week on the same day and at the same time for a total of three weeks. Intervention sessions were randomized and counterbalanced across subjects. Before and after each intervention session, stress was measured using the Daily Stress Inventory, systolic blood pressure (SBP), diastolic blood pressure (DSP), and heart rate (HR). Results: A repeated one-way ANOVA indicated that all three interventions significantly decreased SBP, DBP, and HR and no one intervention was more effective than the other in reducing these dependent variables ($p = 0.058$, $p = 0.315$ and $p= 0.180$ respectively). There was no significant main effect or interaction of the yoga, humour, or reading intervention session on the DSI scores ($p = 0.362$). Conclusions: The results of this study indicate that one 30-minute session of yoga, humour, and reading had similar effects in decreasing acute stress in health science students. This finding is important since these interventions resulted in a significant reduction in stress in a relatively short amount of time, allowing educators to begin to consider different stress management strategies to offer to students.

2.3 CONCLUSION:

The review of related literature shows research were contacted in many fields. Still there is a research gap exit between stresses among higher secondary school students.

Chapter III

Methodology

CHAPTER III

METHODOLOGY

3.1 INTRODUCTION:

The role of methodology is to carry on research work in a scientific and valid manner. Methodology is a process, which reveals all those methods and techniques used by the researcher during the course of studying her research problem. Adaptations of a suitable methodology raise the efficiency and dignity of the research work. The success of any research mainly depends on the tools, techniques and proper methods adopted in the research process.

3.2 DESIGN OF THE STUDY:

A research design is highly essential and it is inevitable as a blueprint. In the present investigation descriptive research design and survey analysis is followed.

3.3 LOCATION OF THE STUDY:

The present investigation was conducted in higher secondary school student in CUDDALORE district

3.4 STATEMENT OF THE PROBLEM:

The research problem is stated as **A study on stress level of higher secondary school students**

3.5 VARIABLES OF THE PRESENT STUDY:

The research variables

1. Stress level of higher secondary school students

Personal variables

1. School type
2. Gender
3. Age
4. Locality
5. Father occupation
6. Mother occupation
7. No. of family members
8. Family type
9. Annual family income
10. Studying class
11. Studying medium
12. Studying hobbies
13. Student aims

3.6 METHOD OF STUDY:

Normative survey method is used in the present study. It seeks to obtain precise information concerning the current status of phenomena and to draw valid general conclusions from the facts discovered. This study is not restricted only to fact findings but in formulation of important principal knowledge and solution of significant problem related to school students and other significant variables related to it. This method of research attempts to describe and interpret what exist at present in the conditions, practices, process, trends and effects. In brief it is an attempt to analyse, interpret and report and the report the present stress level of higher secondary school student.

3.7 SAMPLE OF THE STUDY:

For the present study, the investigator collected sample by using random sampling technique.

The student studying in higher secondary schools were considered as for as sample and population by including gender, age, teacher name, locality, present occupation, father name, mother name, no of family members, family type, annual family income, studying class, studying medium, studying hobbies and student aim as sub-samples. The list of school involved in the sample is given in table no 3.1

TABLE NO 3.1

LIST OF SCHOOLS INVOLVED IN THE STUDY

S. No	School Name	Place	No
1	Thiruvalluvar Matric Higher Secondary School	Panruti	54
2	Government Higher Secondary School	Panruti	50
3	Jayapriya Vidhyalaya Senior Secondary School	Virudhachalam	50
4	Vallalar Gurukulam Higher Sceondary School	Vadalur	50
		Total	204

In the process, the researcher distributed tools to 204 higher secondary school students from the randomly selected higher secondary schools in Cuddalore district for data collection. Out of which the investigator could get back 204 answered tools. Finally, 203 tools were selected. Hence the sample consists of **203** students. The detailed distribution of the sample is given in table No 3.2.

TABLE NO 3.2
THE DETAILED DISTRIBUTION OF THE SAMPLES

S. No	Variables		N	Percentage
1	School Type	Self-Finance	55	27.09
		CBSE	51	25.12
		Aided	46	22.66
		Government	51	25.12
2	Gender	Female	124	61.08
		Male	79	38.92
3	Age	16	64	31.53
		17	139	68.47
4	Locality	Rural	37	18.23
		Urban	166	81.77
5	Father Occupation	Cooli	102	50.25
		Government	64	31.53
		Business	37	18.23
6	Mother Occupation	Home Maker	169	83.25
		Government	22	10.84
		Cooli	12	5.91
7	Family Members	1-3 Members	17	8.37
		4-5 Members	154	75.86
		5 Above	32	15.76
8	Family Type	Joint	80	39.41
		Nuclear	116	57.14
		Single Parent Family	9	4.43
9	Parent Income	Below 50000	63	31.03
		50000 - 100000	75	36.95
		Above 100000	65	32.02
10	Studying Class	11th	5	2.46
		12th	198	97.54
11	Medium	English	155	76.35
		Tamil	48	23.65
12	Hobbies	Playing	43	21.18
		Drawing	57	28.08
		Reading	103	50.74
13	Aim	Profession	177	87.19
		Business	26	12.81

3.8 POPULATION SIZE:

In Cuddalore District, there are 45000, Higher Secondary School Students are enrolled. The samples were selected randomly from the Higher Secondary School. So 0.45% was tested for the problem of the study.

3.9 TOOLS USED:

Student stress rating scale was constructed and validated by **Balamurugan, M. And Kumaran, D. (2008)** have been used in this study. This inventory contains 35 items with 7-point scale.

3.10 DESCRIPTION OF THE TOOLS USED:

Student stress rating scale was constructed and validated by **Balamurugan, M. And Kumaran, D. (2008)** have been used study. This scale consists of 35 statements, which are related to human stress in our daily lives each statement has the range of seven responses. They are every day, once in 2/3 days, once in a week, once in fortnight (15 days), once in a month, rarely and never. The respondants are requested to put a tick mark in the relevant column against each statement.

3.11 STUDENT STRESS RATING SCALE:

As shown in table no 3.3 student stress rating scale consists of 5 factors namely physiological, emotional stress, social stress, examination stress and behavioural stress

TABLE NO 3.3
FACTORS OF STRESS AND THEIR ITEM NUMBER

S. No	Factors of Stress	Item No
1	**Physiological**	5,8,9,10,11,12,13,14,33,34,35
2	**Emotional Stress**	6,15,17,25,27,28,32
3	**Social Stress**	3,4,7,18,19,30,31
4	**Examination Stress**	20,22,23,24,26,29
5	**Behavioural Stress**	1,2,16,21

3.12 ADMINISTRATION AND SCORING:

Before administering the scale, it has been advised orally that responses should be checked as quickly as possible and sincere cooperation is sought for the same and the responses be kept confidential. It is also emphasized that there is no right or wrong answers to the statements. The statements have been designed to understand the differences in individual reactions to various situations. The scale is meant to know the difference between individuals and not mean to rank them as good or bad. It is duly emphasized that all statements have to be responded and no statement should be left unanswered. Manual scoring has been done conveniently with each item or statement scored as: Every day (1), Once in 2/3 days (2), Once in a week (3), Once in a fortnight (15days) (4), Once in a month (5), Rarely (6) and never (7).

The reliability of the student stress rating scale given by the author was **0.87** and its intrinsic validity was **0.93.**

3.13 STATISTICAL TECHNIQUES USED:

The following statistical techniques were used for analysis and interpretation of data

Descriptive analysis

1. Measure of central tendency (Mean)
2. Measure of variability (Standard Deviation)

Differential analysis

1. ‘t ’test
2. ‘F ’test

Multiple correlation and regression analysis

3.14 CONCLUSION:

To find out the stress level of higher secondary school students (students stress rating scale was constructed and validated by **Balamurugan, M. And Kumaran, D. (2008)** have been administered to a sample of 200 students in Cuddalore district. The score was subjected to statistical treatments, which are described in the succeeding chapter IV.

Chapter IV

Analysis and Interpretation

CHAPTER 4

ANALYSIS INTERPRETATION

4.0 INTRODUCTION

The statistical analysis of the data has been presented in this chapter. The collected from 204 higher secondary school student in Cuddalore district (Tamil Nadu) have been analysed as follows to arrive at meaningful conclusion.

- Descriptive Analysis (Mean and standard Deviation),
- Inferential Analysis (t-test and f-test)
- Multiple correlation Analysis
- Regression Analysis

4.1 LEVEL OF SIGNIFICANCE

The level of significance for rejection or acceptance of the hypothesis has to be decided in advance. In reporting the findings of the study, the researcher should indicate the actual probability level associated with the findings so that the researcher may use his own judgement in deciding whether the null hypothesis should be rejected or accepted in the present study0.01, 0.05 level of significant has been taken into account.

4.2 DESCRIPTIVE ANALYSIS

One of the important objectives of present study is to assess stress level of higher secondary school students. For that the investigator used **student stress rating scale was constructed and validated by Balamurugan, M. And Kumaran, D. (2008)**.The test consists of 35 questions. The maximum score for this is 245.**Student stress rating scales** or divided in to very high, high, moderate, low, very low, negligible. In order to divide sample in to above stated category investigated adopted the following method. The categorization was done by dividing the face line normal curve into 6 units, each unit being with Low (0-105), moderate (106-175) and high (176-245).

ANALYSIS THE STRESS LEVEL SCORE OF HIGHER SECONDARY SCHOOL STUDENTS

TABLE NO 4.1

PERCENTAGE ANALYSIS THE STRESS LEVEL SCORE OF HIGHER SECONDARY SCHOOL STUDENTS SAMPLE

S. No	**Stress Levels**	**Score**	**N**	**Percentage**
1	**High**	176-245	45	22.2
2	**Moderate**	106-175	150	73.9
3	**Low**	0-105	18	8.9
		Total	**203**	**100**

From the table 4.1 it is clear that 8.9 percent of the student stress level is low. Then 73.9 percent of the student stress level is Moderate and 22.2 percent of the student stress level is high. **So it is inferred that majority of the students are having moderate stress level.**

ANALYSIS OF THE LEVEL OF STRESS LEVEL OF HIGHER SECONDARY SCHOOL STUDENTS SCORE OF ENTIRE AND SUB SAMPLES:

One of the important objectives of the study is to assess the stress level of higher secondary school students not only for the entire sample but also subsamples wise. For that the mean, standard deviation values have been calculated for entire and subsamples which include school type, age, gender, locality, medium, mother occupation, father occupation, income, family type, hobby and aim.

TABLE NO 4.2

MEAN AND STANDARD DEVIATION OF STRESS LEVEL SCORE FOR TOTAL SAMPLE

S. No	Variables	Mean	N	Std. Deviation
1	**Stress Level**	141.3547	203	31.55935

The above table shows the Mean score and standard deviation of stress level of higher secondary school students, which are found to be 141.3547 and 31.559 respectively. **It is concluded that the stress level of higher secondary school students Moderate.**

TABLE 4.3

DESCRIPTIVE ANALYSIS THE TOTAL STRESS LEVEL OF HIGHER SECONDARY SCHOOL STUDENTS

TABLE NO 4.3

THE DETAILED DISTRIBUTION OF THE SAMPLES

S. No	**Variables**		**N**	**Percentage**	Mean	Standard Deviation
1	School Type	Self-Finance	55	27.09	147.80	33.31
		CBSE	51	25.12	144.86	30.40
		Aided	46	22.66	147.87	38.86
		Government	51	25.12	125.02	13.14
2	Gender	Female	124	61.08	143.17	31.86
		Male	79	38.92	138.49	31.06
3	Age	16	64	31.53	143.03	33.42
		17	139	68.47	140.58	30.75
4	Locality	Rural	37	18.23	143.56	36.01
		Urban	166	81.77	140.86	30.57
5	Father Occupation	Daily Wages	102	50.25	135.00	27.23
		Government	64	31.53	147.56	34.82
		Business	37	18.23	148.10	33.99
6	Mother Occupation	Home Maker	169	83.25	142.46	32.68
		Government	22	10.84	138.36	24.16
		Daily Wages	12	5.91	131.16	26.58
7	Family Members	1-3 Members	17	8.37	145.76	37.26
		4-5 Members	154	75.86	140.45	30.87
		5 Above	32	15.76	143.34	32.37
8	Family Type	Joint	80	39.41	134.20	26.86
		Nuclear	116	57.14	146.31	34.11
		Single Parent Family	9	4.43	142.11	26.18
9	Parent Income	Below 50000	63	31.03	136.58	24.71
		50000 – 100000	75	36.95	141.61	34.80
		Above 100000	65	32.02	145.67	33.31
10	Studying Class	11th	5	2.46	115.40	7.63
		12th	198	97.54	142.01	31.66
11	Medium	English	155	76.35	127.00	15.62
		Tamil	48	23.65	145.80	33.87

12	Hobbies	Playing	43	21.18	151.20	37.29
		Drawing	57	28.08	140.36	32.85
		Reading	103	50.74	137.78	27.43
13	Aim	Profession	177	87.19	140.75	31.62
		Business	26	12.81	145.46	31.40

The above table exhibits the whole details about stress coping strategies, mean and standard deviation for the demographic variables such as age, locality, medium, group, mother qualification, father qualification, parents' occupation, parental income, No. of family members, family type.

It is inferred from the above table that 27.09 percent respondents are self- finance school, 25.12 percent respondents are CBSE school, 22.66 percent respondents are aided school and 25.12 percent of the respondents are government school .The mean and standard deviation for the self- finance school students are 147.80 and 33.31.The mean and standard deviation for the CBSE school students are 144.86 and 30.40. The mean and standard deviation for the aided school students are 147.87 and 38.86. The mean and standard deviation for the government school students are 125.02 and 13.14. **The aided school students have stress level is more than others.**

It is inferred from the above table that 61.08 percent of the respondents are female students and 38.92 percent of the respondents are male students. The mean and standard deviation for the female students are 143.17 and 31.86. The mean and standard deviation for the male students are 138.49 and 31.06. **The female students have stress level is more than male students.**

It is inferred from the above table that 31.53 percent of the respondents are age of 16 and 68.47 percent of the respondents are age of 17. The mean and standard deviation for the age of 16 students are 143.03 and 33.42. The mean and standard deviation for the age of 17 students are 140.58 and 30.75. **The age of 16 students have stress level is more than age of 17 students.**

It is inferred from the above table that 18.23 percent of the respondents are rural students and 81.77 percent of the respondents are urban students. The mean and standard deviation for the rural students are 143.56 and 36.01. The mean and standard deviation for the urban students are 140.86 and 30.57. **The rural student have stress level is more than urban students.**

It is inferred from the above table that 50.25 percent of the respondent fathers are daily wages, 31.53 percent of the respondent fathers are government staffs and 18.23 percent of the respondent fathers are business man. The mean and standard deviation of daily wages are 135.00 and 27.23. The mean and standard deviation of government staffs are 147.56 and 34.82. The mean and standard deviation of business man. **The stress level of student with government staff fathers show more than the others.**

It is inferred from the above table that 83.25 percent of the respondent mothers are home makers, 10.84 percent of the respondent mothers are government staffs and 05.91 percent of the respondent mothers are daily wages. The mean and standard deviation of home makers are 142.46 and 32.68. The mean and standard deviation of government staffs are 138.36 and 24.16. The mean and standard deviation of daily wages are 131.16 and 26.58. **The stress level of student with homemaking mothers show more than the others.**

It is inferred from the above table that 8.37 percent of the respondent 1-3 family members, 75.86 percent of the respondent 4-5 family members and 15.76 percent of the respondent 5 above family members. The mean and standard deviation of 1-3 family members are 145.76 and 37.26. The mean and standard deviation of 4-5 family members are 140.45 and 30.87. The mean and standard deviation of 5 above family members are 143.34 and 32.37. **The students with 1-3 members show more stress level than the others.**

It is inferred from the above table that 39.41 percent of the respondents are join t family, 57.14 percent of the respondents are nuclear family and 4.43 percent of the respondents are single parent family. The mean and standard deviation of joint families are the mean and standard deviation of nuclear families are 146.31 and 31.11.134.20 and 26.86. The mean and standard deviation of single parent families are 142.11 and 26.18. **The students living nuclear family show more stress level is than the others.**

It is inferred from the above table that 31.30 percent parents' income is below 50000, 36.95 percent parent income is 50000-100000 and 32.02 percent parents' income is 100000 above. The mean and standard deviation below 50000 income is 136.58 and 24.71. The mean and standard deviation 50000-100000 income is 141.61 and 34.80. The mean and standard deviation 100000 above income is 145.67 and 33.31. **The students with parental income of 50000-100000 show more stress level than the other.**

It is inferred from the above table that 2.46 percent respondents are 11th standard, 97.54 percent respondents are 12th standard. The mean and standard deviation of 11th students are 115.40 and 7.63. The mean and standard deviation of 12th students are 142.10 and 31.66. **The 12th standard students stress level is more than 11th standard students.**

It is inferred from the above table that 76.35 percent respondents are English medium, 23.65 percent respondents are Tamil medium. The mean and standard deviation of English medium students are 127.00 and 50.62. The mean and standard deviation of Tamil medium students are 145.80 and 33.87. **The Tamil medium students have stress level is more than English medium students.**

It is inferred from the above table that 21.18 percent respondents are playing, 28.08 percent respondents are drawing and 50.74percent respondents are reading. The mean and standard deviation of playing students are 151.20 and 37.29. The mean and standard deviation of drawing students are 140.36 and 32.85. The mean and standard deviation of reading students are 137.78 and 27.43. **The student ‘s in hobbits playing is have more stress level than others.**

It is inferred from the above table that 87.19 percent respondents are profession 12.81 percent respondents are business. The mean and standard deviation of profession students are 140.75 and 31.62. The mean and standard deviation of business are 145.46 and 31.40. **The aim of profession students has stress level is more than business students.**

TABLE 4.4

SIGNIFICANT DIFFERENT AMONG STRESS LEVEL IN RESPECT OF THEIR SCHOOL TYPE

		Sum of Squares	**df**	**Mean Square**	**F Value**	**Result**
Physiological	Between Groups	6982.940	3	2327.647	25.925	S
	Within Groups	17866.913	199	89.783		
	Total	24849.852	202			
Emotional	Between Groups	535.678	3	178.559	2.526	NS
	Within Groups	14065.347	199	70.680		
	Total	14601.025	202			
Social	Between Groups	415.726	3	138.575	1.914	NS
	Within Groups	14405.013	199	72.387		
	Total	14820.739	202			
Examination	Between Groups	489.407	3	163.136	2.407	NS
	Within Groups	13490.100	199	67.789		
	Total	13979.507	202			
Behavioural	Between Groups	246.261	3	82.087	3.340	S
	Within Groups	4890.981	199	24.578		
	Total	5137.241	202			
Total Stress level of students	Between Groups	18473.426	3	6157.809	6.707	S
	Within Groups	182717.037	199	918.176		
	Total	201190.463	202			

In order to find out whether there is any significant difference among stress level in respect of their school's 'F' value is calculated.

It is inferred from the obtained **f-value** that there is no significant difference in different schools in their physiological stress. Since calculated f-value (25.92) which is significant at 5% level. So the alternate hypothesis is accepted. **Therefore, the students with schools significantly differ in their physiological stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different schools in their emotional stress. Since calculated f-value (2.52) which is not significant at 5% level. So the null hypothesis is accepted. **Therefore, the students with schools significantly differ in their emotional stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different schools in their social stress. Since calculated f-value (1.91) which is not significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with schools significantly differ in their social stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different schools in their examination stress. Since calculated f-value (2.40) which is not significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with schools significantly differ in their examination stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different schools in their behavioural stress. Since calculated f-value (3.34) which is significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with schools significantly differ in their behavioural stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different schools in their total stress. Since calculated f-value (6.70) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with schools significantly differ in their total stress.**

TABLE 4.5

T-TEST SHOWING RELATIONSHIP BETWEEN STRESS LEVEL, ITS DIMENSION AND GENDER

	Gender	**N**	**Mean**	**Std. Deviation**	**T. Value**	**Result**
Physiological	Female	124	47.5403	11.53531	-1.441	NS
	Male	79	49.8354	10.27123		
Emotional	Female	124	27.7581	8.76557	2.074	S
	Male	79	25.2405	7.88087		
Social	Female	124	28.3387	8.15489	1.741	NS
	Male	79	26.2025	9.07290		
Examination	Female	124	25.4597	7.86202	0.880	NS
	Male	79	24.4051	9.00359		
Behavioural	Female	124	14.0806	4.81629	1.759	NS
	Male	79	12.8101	5.31827		
Total Stress level of Students	Female	124	143.1774	31.86354	1.031	NS
	Male	79	138.4937	31.06068		

It is inferred from the obtained **t-value** that there is no significant difference in male and female student’s physiological stress. Since their calculated t-value (-1.44) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the male and female students are significantly not differ in their physiological stress.**

It is inferred from the obtained **t-value** that there is no significant difference in male and female student’s emotional stress. Since their calculated t-value (2.07) is significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the male and female students are significantly differ in their emotional stress.**

It is inferred from the obtained **t-value** that there is no significant difference in male and female student's social stress. Since their calculated t-value (1.74) is not significant at 5% level. So, the null hypothesis is rejected and alternate hypothesis is accepted. **Therefore, it is concluded that the male and female students are significantly not differ in their social stress.**

It is inferred from the obtained **t-value** that there is no significant difference in male and female student's examination stress. Since their calculated t-value (.880) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the male and female students are significantly not differ in their examination stress.**

It is inferred from the obtained **t-value** that there is no significant difference in male and female student's behavioural stress. Since their calculated t-value (1.75) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the male and female students are significantly not differ in their behavioural stress.**

It is inferred from the obtained **t-value** that there is no significant difference in male and female student's total stress. Since their calculated t-value (1.03) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the male and female students are significantly not differ in their total stress.**

TABLE 4.6

T-TEST SHOWING RELATIONSHIP BETWEEN STRESS LEVEL, ITS DIMENSION AND AGE

	Age	N	Mean	Std. Deviation	T. Value	Result
Physiological	16	64	50.3906	10.61388	1.714	NS
	17	139	47.5324	11.2271		
Emotional	16	64	26.5156	9.06413	-298	NS
	17	139	26.8993	8.26140		
Social	16	64	28.1094	9.26868	0.679	NS
	17	139	27.2302	8.24209		
Examination	16	64	24.3125	9.42788	-0.797	NS
	17	139	25.3885	7.76886		
Behavioural	16	64	13.7031	5.57967	0.224	NS
	17	139	13.5324	4.79629		
Total Stress level of Students	16	64	143.0313	33.42557	0.513	NS
	17	139	140.5827	30.756.15		

It is inferred from the obtained **t-value** that there is no significant difference in 16 and 17 age of student’s physiological stress. Since their calculated t-value (1.71) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the 16 and 17 age of students are significantly not differ in their physiological stress.**

It is inferred from the obtained **t-value** that there is no significant difference in 16 and 17 age of student’s emotional stress. Since their calculated t-value (-.29) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the 16 and17 age of students are significantly not differ in their emotional stress.**

It is inferred from the obtained **t-value** that there is no significant difference in 16 and 17 age of student's social stress. Since their calculated t-value (.679) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the 16 and 17 age of students are significantly not differ in their social stress.**

It is inferred from the obtained **t-value** that there is no significant difference in 16 and 17 age of student's examination stress. Since their calculated t-value (-.79) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the 16 and 17 age of students are significantly not differ in their examination stress.**

It is inferred from the obtained **t-value** that there is no significant difference in 16 and 17 age of student's behavioural stress. Since their calculated t-value (.22) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the 16 and 17 age of students are significantly not differ in their behavioural stress.**

It is inferred from the obtained **t-value** that there is no significant difference in 16 and 17age of student's total stress. Since their calculated t-value (.51) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the 16 and 17 age of students are significantly not differ in their total stress.**

TABLE 4.7

T-TEST SHOWING RELATIONSHIP BETWEEN STRESS LEVEL, ITS DIMENSION AND LOCALITY

	Locality	N	Mean	Std. Deviation	T. Value	Result
Physiological	Rural	37	49.5676	11.7131	0.687	NS
	Urban	166	48.1807	10.96899		
Emotional	Rural	37	27.5405	9.11529	0.602	NS
	Urban	166	26.6084	8.37874		
Social	Rural	37	27.2162	10.17386	-0.228	NS
	Urban	166	27.5723	8.19853		
Examination	Rural	37	24.0541	9.59151	-0.718	NS
	Urban	166	25.2711	8.02375		
Behavioural	Rural	37	15.1892	5.95277	2.157	S
	Urban	166	13.2289	4.76433		
Total Stress level of Students	Rural	37	143.5676	36.01122	.471`	NS
	Urban	166	140.5614	30.57864		

It is inferred from the obtained **t-value** that there is no significant difference in rural and urban student's physiological stress. Since their calculated t-value (.68) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the rural and urban students are significantly not differ in their physiological stress.**

It is inferred from the obtained **t-value** that there is no significant difference in rural and urban student's emotional stress. Since their calculated t-value (.60) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the rural and urban students are significantly not differ in their emotional stress.**

It is inferred from the obtained **t-value** that there is no significant difference in rural and urban student's social stress. Since their calculated t-value (-.22) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the rural and urban students are significantly not differ in their social stress.**

It is inferred from the obtained **t-value** that there is no significant difference in rural and urban student's examination stress. Since their calculated t-value (-.718) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the rural and urban students are significantly not differ in their examination stress.**

It is inferred from the obtained **t-value** that there is no significant difference in rural and urban student's behavioural stress. Since their calculated t-value (2.15) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the rural and urban students are significantly not differ in their behavioural stress.**

It is inferred from the obtained **t-value** that there is no significant difference in rural and urban student's total stress. Since their calculated t-value (.47) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the rural and urban students are significantly not differ in their total stress.**

TABLE 4.8

SIGNIFICANT DIFFERENT AMONG STRESS LEVEL IN RESPECT OF THEIR FATHER OCCUPATION

		Sum of Squares	Df	Mean Square	F Value	Result
Physiological	Between Groups	2864.580	2	1432.290	13.030	S
	Within Groups	21985.273	200	109.926		
	Total	24849.852	202			
Emotional	Between Groups	48.562	2	24.281	0.334	NS
	Within Groups	14552.463	200	72.762		
	Total	14601.025	202			
Social	Between Groups	449.363	2	224.681	3.127	S
	Within Groups	14371.376	200	71.857		
	Total	14820.739	202			
Examination	Between Groups	444.368	2	222.184	3.283	S
	Within Groups	13535.140	200	67.676		
	Total	13979.507	202			
Behavioural	Between Groups	97.445	2	48.723	1.934	NS
	Within Groups	5039.796	200	25.119		
	Total	5137.241	202			
Total Stress level of Students	Between Groups	8260.155	2	4130.078	4.281	S
	Within Groups	192930.308	200	964.652		
	Total	201190.463	202			

In order to find out whether there is any significant difference among stress level in respect of their school ‘F’ value is calculated.

It is inferred from the obtained **f-value** that there is no significant difference in father occupation in their physiological stress. Since calculated f-value (13.03) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different father occupation significantly differ in their physiological stress.**

It is inferred from the obtained **f-value** that there is no significant difference in father occupation in their emotional stress. Since calculated f-value (0.33) which is not significant at

5% level. So, the null hypothesis is accepted. **Therefore, the students with different father occupation significantly differ not in their emotional stress.**

It is inferred from the obtained **f-value** that there is no significant difference in father occupation in their social stress. Since calculated f-value (3.12) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different father occupation significantly differ in their social stress.**

It is inferred from the obtained **f-value** that there is no significant difference in father occupation in their examination stress. Since calculated f-value (3.28) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different father occupation significantly differ in their examination stress.**

It is inferred from the obtained **f-value** that there is no significant difference in father occupation in their behavioural stress. Since calculated f-value (1.93) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father occupation significantly not differ in behavioural stress.**

It is inferred from the obtained **f-value** that there is no significant difference in father occupation in their total stress. Since calculated f-value (4.28) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different father occupation significantly differ in total stress.**

TABLE 4.9

SIGNIFICANT DIFFERENT AMONG STRESS LEVEL IN RESPECT OF THEIR MOTHER OCCUPATION

		Sum of Squares	df	Mean Square	F Value	Result
Physiological	Between Groups	287.299	2	143.649	1.170	NS
	Within Groups	24562.553	200	122.813		
	Total	24849.852	202			
Emotional	Between Groups	409.488	2	204.744	2.885	NS
	Within Groups	14191.536	200	70.958		
	Total	14601.025	202			
Social	Between Groups	111.423	2	55.711	0.757	NS
	Within Groups	14709.316	200	73.547		
	Total	14820.739	202			
Examination	Between Groups	62.663	2	31.332	0.450	NS
	Within Groups	13916.844	200	69.584		
	Total	13979.507	202			
Behavioural	Between Groups	27.990	2	13.995	0.548	NS
	Within Groups	51059.252	200	25.546		
	Total	5137.241	202			
Total Stress level of Students	Between Groups	1651.634	2	825.817	0.828	NS
	Within Groups	199538.829	200	997.694		
	Total	201190.463	202			

In order to find out whether there is any significant difference among stress level in respect of their school ‘F’ value is calculated. It is inferred from the obtained **f-value** that there is no significant difference in Mother occupation in their physiological stress. Since calculated f-value (1.17) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father occupation significantly not differ in their physiological stress.**

It is inferred from the obtained **f-value** that there is no significant difference in Mother occupation in their Emotional stress. Since calculated f-value (2.88) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father occupation significantly not differ in their Emotional stress.**

It is inferred from the obtained **f-value** that there is no significant difference in Mother occupation in their Social stress. Since calculated f-value (0.75) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father occupation significantly not differ in their Social stress.**

It is inferred from the obtained **f-value** that there is no significant difference in Mother occupation in their Examination stress. Since calculated f-value (0.45) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father occupation significantly not differ in their Examination stress.**

It is inferred from the obtained **f-value** that there is no significant difference in Mother occupation in their Behavioural stress. Since calculated f-value (0.54) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father occupation significantly not differ in their Behavioural stress.**

It is inferred from the obtained **f-value** that there is no significant difference in Mother occupation in their Total stress. Since calculated f-value (0.82) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father occupation significantly not differ in their Total stress.**

TABLE 4.10

SIGNIFICANT DIFFERENT AMONG STRESS LEVEL IN RESPECT OF THEIR FAMILY MEMBERS

		Sum of Squares	df	Mean Square	F Value	Result
Physiological	Between Groups	128.186	2	64.093	0.519	NS
	Within Groups	24721.666	200	123.608		
	Total	24829.852	202			
Emotional	Between Groups	236.191	2	118.095	1.644	NS
	Within Groups	14364.834	200	71.824		
	Total	14601.025	202			
Social	Between Groups	1.312	2	0.656	0.009	NS
	Within Groups	14819.427	200	74.097		
	Total	14820.739	202			
Examination	Between Groups	33.373	2	16.686	0.239	NS
	Within Groups	13946.135	200	69.731		
	Total	13979.507	202			
Behavioural	Between Groups	12.398	2	6.199	0.242	NS
	Within Groups	5124.844	200	25.624		
	Total	5137.241	202			
Total Stress level of Students	Between Groups	582.004	2	291.002	0.290	NS
	Within Groups	200608.459	200	1003.042		
	Total	201190.463	202			

In order to find out whether there is any significant difference among stress level in respect of their school ‘F’ value is calculated.

It is inferred from the obtained **f-value** that there is no significant difference in different family members in their physiological stress. Since calculated f-value (0.51) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family members significantly not differ in their physiological stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family members in their emotional stress. Since calculated f-value (1.64) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family members significantly not differ in their emotional stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family members in their social stress. Since calculated f-value (0.009) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family members significantly not differ in their social stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family members in their examination stress. Since calculated f-value (0.23) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family members significantly not differ in their examination stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family members in their behavioural stress. Since calculated f-value (0.24) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family members significantly not differ in their behavioural stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family members in their total stress. Since calculated f-value (0.29) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family members significantly not differ in their total stress.**

TABLE 4.11

SIFNIFICANT DIFFERNET AMONG STRESS LEVEL IN RESPECT OF THEIR FAMILY TYPE

		Sum of Squares	df	Mean Square	F Value	Result
Physiological	Between Groups	2479.529	2	1239.765	11.084	S
	Within Groups	22370.323	200	111.852		
	Total	24849.852	202			
Emotional	Between Groups	101.710	2	50.855	0.701	NS
	Within Groups	14499.315	200	72.497		
	Total	14601.025	202			
Social	Between Groups	34.025	2	17.013	0.230	NS
	Within Groups	14786.713	200	73.934		
	Total	14820.739	202			
Examination	Between Groups	151.003	2	75.502	1.092	NS
	Within Groups	13828.504	200	69.143		
	Total	13979.507	202			
Behavioural	Between Groups	50.067	2	25.033	0.984	NS
	Within Groups	5087.175	200	25.436		
	Total	5137.240	202			
Total Stress level of Students	Between Groups	6906.143	2	3453.071	3.555	S
	Within Groups	194284.320	200	971.422		
	Total	201190.463	202			

In order to find out whether there is any significant difference among stress level in respect of their school ‘F’ value is calculated.

It is inferred from the obtained **f-value** that there is no significant difference in different family types in their physiological stress. Since calculated f-value (11.08) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different family types significantly differ in their physiological stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family types in their emotional stress. Since calculated f-value (0.70) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family types significantly not differ in their emotional stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family types in their social stress. Since calculated f-value (0.23) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family types significantly not differ in their social stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family types in their examination stress. Since calculated f-value (1.09) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family types significantly not differ in their examination stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family types in their behavioural stress. Since calculated f-value (0.70) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family types significantly not differ in their behavioural stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family types in their total stress. Since calculated f-value (3.55) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different family types significantly differ in their total stress.**

TABLE 4.12

SIGNIFIANT DIFFERENT AMONG STRESS LEVEL IN RESPECT OF THEIR PARENT INCOME

		Sum of Squares	**df**	**Mean Square**	**F Value**	**Result**
Physiological	Between Groups	2196.566	2	1098.283	9.696	S
	Within Groups	22653.287	200	113.266		
	Total	24849.852	202			
Emotional	Between Groups	253.853	2	126.927	1.769	NS
	Within Groups	14347.171	200	71.736		
	Total	14601.025	202			
Social	Between Groups	154.907	2	77.454	1.056	NS
	Within Groups	14665.832	200	73.329		
	Total	14820.739	202			
Examination	Between Groups	148.045	2	74.022	1.070	NS
	Within Groups	13831.463	200	69.157		
	Total	13979.507	202			
Behavioural	Between Groups	143.444	2	71.722	2.872	NS
	Within Groups	4993.797	200	24.969		
	Total	5137.241	202			
Total Stress level of Students	Between Groups	2651.191	2	1325.596	1.335	NS
	Within Groups	198539.272	200	992.696		
	Total	20190.463	202			

In order to find out whether there is any significant difference among stress level in respect of their school ‘F’ value is calculated.

It is inferred from the obtained **f-value** that there is no significant difference in different family income in their physiological stress. Since calculated f-value (9.69) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different family income significantly differ in their physiological stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family income in their emotional stress. Since calculated f-value (1.08) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family income significantly not differ in their emotional stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family income in their social stress. Since calculated f-value (1.05) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family income significantly not differ in their social stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family income in their examination stress. Since calculated f-value (1.07) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family income significantly not differ in their examination stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family income in their behavioural stress. Since calculated f-value (2.87) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family income significantly not differ in their behavioural stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different family income in their total stress. Since calculated f-value (1.33) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different family income significantly not differ in their total stress.**

TABLE 4.13

T-TEST SHOWING RELATIONSHIP BETWEEN STRESS LEVEL, ITS DIMENSION AND STUDYING CLASS

	Std	N	Mean	Std. Deviation	T. Value	Result
Physiological	11th	5	33.8	4.91935	-6.429	S
	12th	98	48.803	10.958		
Emotional	11th	5	22.4	3.64692	-1.167	NS
	12th	98	26.8889	8.56434		
Social	11th	5	21.4	6.38749	-1.621	NS
	12th	98	27.6616	8.56931		
Examination	11th	5	24	3.53553	-0.285	NS
	12th	98	25.0758	8.40711		
Behavioural	11th	5	13.8000	2.58844	0.096	NS
	12th	98	13.5808	5.09315		
Total Stress level of Students	11th	5	115.4000	7.63544	-6.507	S
	12th	98	142.0101	31.6632		

It is inferred from the obtained **t-value** that there is no significant difference in 11th and 12th student’s physiological stress. Since their calculated t-value (-6.42) is significant at 5% level. So, the alternate hypothesis is accepted and null hypothesis is rejected. **Therefore, it is concluded that the 11th and 12th students are significantly differed in their physiological stress.**

It is inferred from the obtained **t-value** that there is no significant difference in 11th and 12th student’s emotional stress. Since their calculated t-value (-1.16) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the 11th and 12th students are significantly not differed in their emotional stress.**

It is inferred from the obtained **t-value** that there is no significant difference in 11th and 12th student’s social stress. Since their calculated t-value (-1.62) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the 11th and 12th students are significantly not differed in their social stress.**

It is inferred from the obtained **t-value** that there is no significant difference in 11th and 12th student’s examination stress. Since their calculated t-value (-.28) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the 11th and 12th students are significantly not differed in their examination stress.**

It is inferred from the obtained **t-value** that there is no significant difference in 11th and 12th student’s behavioural stress. Since their calculated t-value (.09) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the 11th and 12th students are significantly not differed in their behavioural stress.**

It is inferred from the obtained **t-value** that there is no significant difference in 11th and 12th student’s total stress. Since their calculated t-value (-6.50) is significant at 5% level. So, the alternate hypothesis is accepted and null hypothesis is rejected. **Therefore, it is concluded that the 11th and 12th students are significantly differed in their total stress.**

TABLE 4.14

T-TEST SHOWING RELATIONSHIP BETWEEN STRESS LEVEL, ITS DIMENSION AND STUDYING MEDIUM

	Medium	N	Mean	Std. Deviation	T. Value	Result
Physiological	English	48	39.0625	8.33706	-8.427	S
	Tamil	155	51.3355	10.21285		
Emotional	English	48	26.2917	5.01894	-0.612	NS
	Tamil	155	26.929	9.32885		
Social	English	48	25.8542	6.10890	-1.886	S
	Tamil	155	28.0194	9.15060		
Examination	English	48	22.5417	4.63088	-3.328	S
	Tamil	155	25.8258	9.03683		
Behavioural	English	48	13.2500	3.96433	-0.714	NS
	Tamil	155	13.6903	5.53451		
Total Stress level of Students	English	48	127.0000	15.62867	-5.319	S
	Tamil	155	145.8000	33.87878		

It is inferred from the obtained **t-value** that there is no significant difference in Tamil and English Medium student’s physiological stress. Since their calculated t-value (-8.427) is significant at 5% level. So, the alternate hypothesis is accepted and null hypothesis is rejected. **Therefore, it is concluded that the Tamil and English Medium students are significantly differ in their physiological stress.**

It is inferred from the obtained **t-value** that there is no significant difference in Tamil and English Medium student’s emotional stress. Since their calculated t-value (-.61) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the Tamil and English Medium students are significantly not differ in their emotional stress.**

It is inferred from the obtained **t-value** that there is no significant difference in Tamil and English Medium student's social stress. Since their calculated t-value (-1.88) is significant at 5% level. So, the alternate hypothesis is accepted and null hypothesis is rejected. **Therefore, it is concluded that the Tamil and English Medium students are significantly differ in their social stress.**

It is inferred from the obtained **t-value** that there is no significant difference in Tamil and English Medium student's examination stress. Since their calculated t-value (-3.32) is significant at 5% level. So, the alternate hypothesis is accepted and null hypothesis is rejected. **Therefore, it is concluded that the Tamil and English Medium students are significantly differ in their examination stress.**

It is inferred from the obtained **t-value** that there is no significant difference in Tamil and English Medium student's behavioural stress. Since their calculated t-value (-.71) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the Tamil and English Medium students are significantly not differ in their behavioural stress.**

It is inferred from the obtained **t-value** that there is no significant difference in Tamil and English Medium student's total stress. Since their calculated t-value (-5.31) is significant at 5% level. So, the alternate hypothesis is accepted and null hypothesis is rejected. **Therefore, it is concluded that the Tamil and English Medium students are significantly differ in their total stress.**

TABLE 4.15

SIGNIFICANT DIFFERENT AMONG STRESS LEVEL IN RESPECT OF THEIR STUDYING HOBBIES

		Sum of Squares	df	Mean Square	F Value	Result
Physiological	Between Groups	1041.120	2	520.560	4.373	S
	Within Groups	23808.732	200	119.044		
	Total	24849.852	202			
Emotional	Between Groups	156.111	2	78.055	1.081	NS
	Within Groups	14444.914	200	72.225		
	Total	14601.025	202			
Social	Between Groups	159.234	2	79.617	1.086	NS
	Within Groups	14661.505	200	73.308		
	Total	14820.739	202			
Examination	Between Groups	217.627	2	108.813	1.581	NS
	Within Groups	13761.881	200	68.809		
	Total	13979.507	202			
Behavioural	Between Groups	116.054	2	58.027	2.311	NS
	Within Groups	5021.188	200	25.106		
	Total	5137.241	202			
Total Stress level of Students	Between Groups	5542.783	2	2771.391	2.833	NS
	Within Groups	195647.680	200	978.238		
	Total	201190.463	202			

In order to find out whether there is any significant difference among stress level in respect of their school ‘F’ value is calculated.

It is inferred from the obtained **f-value** that there is no significant difference in different hobbies in their physiological stress. Since calculated f-value (4.37) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different hobbies significantly differ in their physiological stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different hobbies in their emotional stress. Since calculated f-value (1.08) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different hobbies significantly not differ in their emotional stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different hobbies in their social stress. Since calculated f-value (1.08) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different hobbies significantly not differ in their social stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different hobbies in their examination stress. Since calculated f-value (1.58) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different hobbies significantly not differ in their examination stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different hobbies in their behavioural stress. Since calculated f-value (2.31) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different hobbies significantly not differ in their behavioural stress.**

It is inferred from the obtained **f-value** that there is no significant difference in different hobbies in their total stress. Since calculated f-value (2.83) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different hobbies significantly not differ in their total stress.**

TABLE 4.16

T-TEST SHOWING RELATIONSHIP BETWEEN STRESS LEVEL, ITS DIMENSION AND AIM

	Aim	N	Mean	Std. Deviation	T. Value	Result
Physiological	Professional	117	48.00000	11.29712	-1.457	NS
	Business	26	51.3846	9.22638		
Emotional	Professional	117	26.7345	8.34774	-0.191	NS
	Business	26	27.0769	9.96198		
Social	Professional	117	27.5141	8.62153	0.029	NS
	Business	26	27.4615	8.33897		
Examination	Professional	117	24.8305	8.29393	-0.977	NS
	Business	26	26.5385	8.50050		
Behavioural	Professional	117	16.6723	4.87864	0.535	NS
	Business	26	13.0000	6.12536		
Total Stress level of Students	Professional	117	140.7516	31.62485	-0.71	NS
	Business	26	145.4615	31.40985		

It is inferred from the obtained **t-value** that there is no significant difference in Aim of student's physiological stress. Since their calculated t-value (-1.45) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the aim of student is significantly not differ in their physiological stress.**

It is inferred from the obtained **t-value** that there is no significant difference in Aim of student's emotional stress. Since their calculated t-value (-.19) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the aim of student is significantly not differ in their emotional stress.**

It is inferred from the obtained **t-value** that there is no significant difference in aim of student's social stress. Since their calculated t-value (.029) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the aim of student is significantly not differ in their social stress.**

It is inferred from the obtained **t-value** that there is no significant difference in Aim of student's examination stress. Since their calculated t-value (-.97) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the aim of student is significantly not differ in their examination stress.**

It is inferred from the obtained **t-value** that there is no significant difference in Aim of student's behavioural stress. Since their calculated t-value (.53) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the aim of student is significantly not differ in their behavioural stress.**

It is inferred from the obtained **t-value** that there is no significant difference in Aim of student's total stress. Since their calculated t-value (-.71) is not significant at 5% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the aim of students is significantly not differ in their total stress.**

TABLE 4.17

CORRELATION ANALYSIS

	Gender	Age	Locality	Father Occupation	Mother Occupation	Family Members	Family Type	Family Income	Standard	Medium	Hobbies	Aim	Physiological	Emotional	Social	Examination	Behavioural	Total
S Type	-.268**	.171*	0.123	-.433**	.031	-.043	-.412**	-.414**	-.216**	-.734**	.286**	-.129	-.445**	.009	-.159*	-.123	-.047	-.237**
Gender		-.241**	-.120	.189**	-.035	.045	.281**	.232**	0.127	.420**	-.030	.057	.101	-.145*	-.122	-.062	-.123	-.073
Age			.092	-.090	.010	-.093	-.215**	-.018	.097	-.278**	.172*	-.025	-.120	.021	-.048	.060	-.016	-.036
Locality				.053	.127	.019	-.203**	.102	.007	-.233**	.224**	-.048	-.048	-.042	.016	.057	-.150*	-.033
Father Occupation					.044	.051	.256**	.469**	.100	.465**	-.185**	.045	.301**	.054	.151*	.168*	-.136	.184**
Mother Occupation						.011	-.047	.052	-.051	-.088	.039	-.051	-.107	-.160*	.057	-.054	-.065	-.090
No of Family Members							-.338**	-.015	.024	-.059	-.031	.033	.065	-.046	-.008	-.017	-.046	-.004
Family Type								.228**	.071	.541**	-.166*	.107	.295**	.057	.044	.065	.081	.161*
Family Income									.122	.489**	-.137	-.023	.296**	-.036	.060	.090	-.124	.115
Standard										.061	-.141*	-.034	.210**	.082	.114	.020	-.007	.131
Medium											-.304**	0.08	.471**	.032	.108	.168*	.037	.254**
Hobbies												-.087	-.204**	-.101	-.076	-.105	-.052	-.156*
Aim													.102	.013	-.002	.069	-.045	.050
Physiological														.484**	.470**	.537**	.309**	.800**
Emotional															.472**	.639**	.390**	.798**
Social																.454**	.344**	.738**
Examination																	.375**	.808**
Behavioural																		.566**

Coefficient correlation between school type, age and hobbies are found to be .171 and .286 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between school type, age and hobbies.**

Coefficient of correlation between school type, examination stress and stress level are found to -.123 and -.237 significant at 0.05% level. **Hence it is concluded that there is negative significant relationship between school type, examination stress and stress level.**

Coefficient of correlation between gender, father occupation, family type, family income and medium are found to .189, .281, .232 and .420 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between gender, father occupation, family type, family income and medium.**

Coefficient correlation between age and hobbies are found to be .172 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between age and hobbies.**

Coefficient correlation between locality and hobbies are found to be .224 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between locality and hobbies.**

Coefficient correlation between locality and stress level are found to be -.033 significant at 0.05% level. **Hence it is concluded that there is negative significant relationship between locality and stress level.**

Coefficient correlation between father occupation, family type, family income, medium, physiological stress, social stress, examination stress and stress level are found to be .256, .469. .65, .301, .151, .168 and .184 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between father occupation, family type,**

family income, medium, physiological stress, social stress, examination stress and stress level.

Coefficient correlation between family type, family income, medium, physiological stress, and stress level are found to be .228, .541, .295 and .161 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between family type, family income, medium, physiological stress and stress level.**

Coefficient correlation between family income, medium and physiological stress are found to be .489 and .296 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between family income, medium and physiological stress.**

Coefficient correlation between standard and physiological stress are found to be .210 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between standard and physiological stress.**

Coefficient correlation between medium, physiological stress, examination stress and stress level are found to be .471, .168 and .254 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between medium, physiological stress, examination stress and stress level.**

Coefficient correlation between hobbies and stress level are found to be -.156 significant at 0.05% level. **Hence it is concluded that there is negative significant relationship between hobbies and stress level.**

Coefficient correlation between physiological stress, emotional stress, social stress, examination stress, behavioural stress and stress level are found to be .484, .470, .537, .309 and .800 significant at 0.05% level. **Hence it is concluded that there is positive significant**

relationship between physiological stress, emotional stress, social stress, examination stress, behavioural stress and stress level.

Coefficient correlation between emotional stress, social stress, examination stress, behavioural stress and stress level are found to be .472, .639, .390 and .798 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between emotional stress, social stress, examination stress, behavioural stress and stress level.**

Coefficient correlation between social stress, examination stress, behavioural stress and stress level are found to be .454, .344 and .738 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between social stress, examination stress, behavioural stress and stress level.**

Coefficient correlation between examination stress, behavioural stress and stress level are found to be .375 and .808 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between examination stress, behavioural stress and stress level.**

Coefficient correlation between behavioural stress and stress level are found to be .566 significant at 0.05% level. **Hence it is concluded that there is positive significant relationship between behavioural stress and stress level.**

TABLE 4.18

STEPWISE REGRESSION RESULT BETWEEN STRESS LEVEL AND THEIR SUBSAMPLE

Model	**B**	**Std. Error**	**Beta**	**Pearson r**	**Sr^2**	**Structure Coefficient**
(Constant)	61.406	27.642				
medium	25.482	5.422	.344	.254	.097	.726
gender	-15.164	4.755	-.235	-.073	.045	.209
Std	28.388	13.597	.140	.131	.019	.374

Note. The dependent variable is **Stress level.** **R^2**= .123, Adjusted R^2= .109, Sr^2 is squared semi-partial correlation. * $p < .05$, F (3,199) =9.270.

The prediction model contained three of the thirteen predictors and was reached in three steps with ten variables removed. The model was statistically significant, F (3,199) =9.270**, *p* < .001,** and accounted for approximately **12%** of the variance of **stress level** (R^2=.123, Adjusted R^2 =.109). **Stress level is** primarily predicted by the medium, gender and followed by Standard. The raw and standardized regression coefficient of predictors together with their correlation with **stress level**, their squared semi-partial correlations, and their structure coefficients are shown in table 4.16.

The medium and gender received the strongest weight in model and Standard received the less weight in model. With the sizeable correlations between the predictors, the unique variance explained by each of the variables indexed by the squared semi-partial correlation was relatively low: The medium, gender and Standard uniquely accounted for approximately **10%, 5%** and **2%** of the **stress level**. Inspection of the structure coefficient suggests that, **the medium of instruction was a strong predictor of stress** level and Standard **was a moderate predictor of stress level** of **the higher secondary school students.**

TABLE 4.19
STEPWISE REGRESSION RESULT BETWEEN STRESS LEVEL AND ITS SUB SCALES

Model	**B**	**Std. Error**	**Beta**	**Pearson r**	**Sr^2**	**Structure Coefficient**
(Constant)	1.084E-13	.000				
Physiological Stress	1.000	.000	.264	.808	.035	.808
Emotional	1.000	.000	.351	.800	.078	.800
Social	1.000	.000	.271	.738	.050	.738
Examination	1.000	.000	.269	.798	.038	.798
Behavioural	1.00	.0`00	.160	.566	.020	.566

Note: The dependent variable is Stress level. R^2 =1, Adjusted, R^2=1, Sr^2 is squared semi-partial correlation. . * *p* < .05, F (5,197)=0

The prediction model contained five of the five predictors and was reached in five steps with no variables removed. The model was statistically significant, *F (5,195)* =0***, p* < .001,** and accounted for approximately **100%** of the variance of stress **level** (R^2=1, Adjusted R^2 =1). **Stress level** is primarily predicted by the physiological, Emotional, Social, Examination, Behavioural Stress factors. The raw and standardized regression coefficient of predictors together with their correlation with **stress level**, their squared semi-partial correlations, and their structure coefficients are shown in table 4.17. The Examination stress factor received the strongest weight in model and followed by Physiological, Social, Emotional and Behavioural stress factors. Behavioural stress factor received the less weight in model. With the sizeable correlations between the predictors, the unique variance explained by each of the variables indexed by the squared semi-partial correlation was relatively low: The Examination stress, Physiological, Social, Emotional and Behavioural stress Factors uniquely accounted for **approximately 4%, 8%, 5%,4% and 2%** of the **stress level**. Inspection of the structure coefficient suggests that, **the Examination stress was a dominant stress factor and Behavioural stress was a least stress level factor of the higher secondary school students.**

Chapter V

Summary, Findings Suggestions and Conclusion

CHAPTER V

SUMMARY, FINDING, RECOMMENDATION, SUGGESTIONS AND CONCLUSION

5.1 SUMMARY

This present research is an attempt to study on stress level of higher secondary school student. 203 samples were taken for the assessment about the stress level of higher secondary school students from higher secondary schools. Students stress rating scale by **Balamurugan, M And Kumaran, D. (2008)** is used in this present study. Descriptive analysis, inferential analysis, correlation analysis and regression analysis were used to analyses the data. The overall result of the study revealed that the higher secondary school students stress level is **Moderate.** There is significant difference among the stress level of the higher secondary school students related to personal variables only in their medium. **The prediction model contained three of the thirteen predictors and was reached in three** steps with ten variables removed. The model was statistically significant, F (3,199) =9.270**,** $p < .001$**,** and accounted for approximately **12%** of the variance of **stress level** (R^2=.123, Adjusted R^2 =.109). **the medium of instruction was a strong predictor of stress** level and Standard **was a moderate predictor of stress level** of **the higher secondary school students. the Examination stress was a dominant stress factor and Behavioural stress was a least stress level factor of the higher secondary school students.**

MAJOR FINDING

STRESS LEVEL OF HIGHER SECONDARY SCHOOL STUDENTS

DISCRIPTIVE ANALYSIS

- The higher secondary school students stress level is **Moderate.**
- The aided school students have stress level is more than others.
- The female students have stress level is more than male students.
- The age of 16 students have stress level is more than age of 17 students.
- The rural student has stress level is more than urban students.
- The stress level of student with government staff fathers show more than the others
- The stress level of student with homemaking mothers show more than the others.
- The students with 1-3 members show more stress level than the others.
- The students living nuclear family show more stress level is than the others.
- The students with parental income of 50000-100000 show more stress level than the other. The 12th standard students stress level is more than 11th standard students.
- The Tamil medium students have stress level is more than English medium students.
- The student's in hobbits playing is have more stress level than others.
- The aim of profession students has stress level is more than business students.

INFERENTIAL ANALYSIS

- The students with school type significantly differ in their physiological stress.
- The students with school type significantly not differ in their emotional stress.
- The students with school type significantly not differ in their social stress.
- The students with school type significantly not differ in their examination stress.
- The students with school type significantly differ in their behavioural stress
- The students with school type significantly differ in their total stress.

- The female and male students are significantly not differed in their physiological stress.
- The female and male students are significantly differed in their emotional stress.
- The female and male students are significantly not differed in their social stress.
- The female and male students are significantly not differed in their examination stress.
- The female and male students are significantly not differed in their behavioural stress.
- The female and male students are significantly not differed in their total stress.
- The 16 and 17 age of students are significantly not differed in their physiological stress.
- The 16 and 17 age of students are significantly not differed in their emotional stress.
- The 16 and 17 age of students are significantly not differed in their social stress.
- The 16 and 17 age of students are significantly not differed in their examination stress.
- The 16 and 17 age of students are significantly not differed in their behavioural stress.
- The 16 and 17 age of students are significantly not differed in their total stress.
- The rural and urban students are significantly not differed in their physiological stress.
- The rural and urban students are significantly not differed in their emotional stress.
- The rural and urban students are significantly not differed in their social stress.
- The rural and urban students are significantly not differed in their examination stress.
- The rural and urban students are significantly differed in their behavioural stress.
- The rural and urban students are significantly not differed in their total stress.
- The students with father occupation significantly differ in their physiological stress.
- The students with father occupation significantly not differ in their emotional stress.
- The students with father occupation significantly differ in their social stress.

- The students with father occupation significantly differ in their examination stress.
- The students with father occupation significantly not differ in their behavioural stress.
- The students with father occupation significantly differ in their total stress.
- The students with mother occupation significantly not differ in their physiological stress.
- The students with mother occupation significantly not differ in their emotional stress.
- The students with mother occupation significantly not differ in their social stress.
- The students with mother occupation significantly not differ in their examination stress.
- The students with mother occupation significantly not differ in their behavioural stress.
- The students with mother occupation significantly not differ in their total stress.
- The students with family members significantly not differ in their physiological stress.
- The students with family members significantly not differ in their emotional stress.
- The students with family members significantly not differ in their social stress.
- The students with family members significantly not differ in their examination stress.
- The students with family members significantly not differ in their behavioural stress.
- The students with family members significantly not differ in their total stress.
- The students with family type significantly differ in their physiological stress.
- The students with family type significantly not differ in their emotional stress.
- The students with family type significantly not differ in their social stress.
- The students with family type significantly not differ in their examination stress.
- The students with family type significantly not differ in their behavioural stress.
- The students with family type significantly differ in their total stress.
- The students with parent income significantly differ in their physiological stress.

- The students with parent income significantly not differ in their emotional stress.
- The students with parent income significantly not differ in their social stress.
- The students with parent income significantly not differ in their examination stress.
- The students with parent income significantly not differ in their behavioural stress.
- The students with parent income significantly not differ in their total stress.
- The 11th and 12th students are significantly differed in their physiological stress.
- The 11th and 12th students are significantly not differed in their emotional stress.
- The 11th and 12th students are significantly not differed in their social stress.
- The 11th and 12th students are significantly not differed in their examination stress.
- The 11th and 12th students are significantly not differed in their behavioural stress.
- The 11th and 12th students are significantly differed in their total stress.
- The English and Tamil medium students are significantly differed in their physiological stress.
- The English and Tamil medium students are significantly not differed in their emotional stress.
- The English and Tamil medium students are significantly differed in their social stress.
- The English and Tamil medium students are significantly differed in their examination stress.
- The English and Tamil medium students are significantly not differed in their behavioural stress.
- The English and Tamil medium students are significantly differed in their total stress.
- The students with hobbies significantly differ in their physiological stress.
- The students with hobbies significantly not differ in their emotional stress.
- The students with hobbies significantly not differ in their social stress.

- The students with hobbies significantly not differ in their examination stress.
- The students with hobbies significantly not differ in their behavioural stress.
- The students with hobbies significantly not differ in their total stress.
- The professional and business aim of students are significantly not differed in their physiological stress.
- The professional and business aim of students are significantly not differed in their emotional stress.
- The professional and business aim of students are significantly not differed in their social stress.
- The professional and business aim of students are significantly not differed in their examination stress.
- The professional and business aim of students are significantly not differed in their behavioural stress.
- The professional and business aim of students are significantly not differed in their total stress.

CORRELATIONAL ANALYSIS

- There is positive significant relationship between school type, age and hobbies.
- There is negative significant relationship between school type, social stress and stress level.
- There is positive significant relationship between gender, father occupation, family type, family income and medium.
- There is positive significant relationship between age and hobbies.
- There is positive significant relationship between locality and hobbies.
- There is negative significant relationship between locality and behavioural stress.

- There is positive significant relationship between father occupation, family type, family income, medium, physiological stress, social stress, examination stress and stress level.
- There is positive significant relationship between family type, family income, medium, physiological stress and stress level.
- There is positive significant relationship between family income, medium and physiological stress.
- There is positive significant relationship between Standard and physiological stress.
- There is positive significant relationship between medium, physiological stress, examination stress and stress level.
- There is negative significant relationship between hobbies and stress level.
- There is positive significant relationship between physiological stress, emotional stress, social stress, examination stress, behavioural stress and stress level.
- There is positive significant relationship between emotional stress, social stress, examination stress, behavioural stress and stress level.
- There is positive significant relationship between social stress, examination stress, behavioural stress and stress level.
- There is positive significant relationship between examination stress, behavioural stress and stress level.
- There is positive significant relationship between behavioural stress and stress level.

REGRESSION ANALYSIS

- ✓ The medium of instruction was a strong predictor of stress level and standard was a moderate predictor of stress level of the higher secondary school student.
- ✓ The examination stress was a dominant stress factor and behavioural stress was a least stress level factor of the higher secondary school student.

5.3 RECOMMENDATION

This study clearly revealed the stress level of higher secondary school students in Cuddalore district. Higher secondary school students use the behavioural stress very low. So, the researchers suggest following recommendation for the better stress management and mentally healthy life.

- Self-control technique like Yoga
- Time management techniques
- Adjustment techniques
- Problem Solving techniques
- Developing integrated personality
- Avoiding maladjustment
- Transaction analysis
- SWOT analysis
- Proper planning
- Proper Organizing
- Proper Controlling

5.4 SUGGESTIONS:

Following suggestions are given for future research.

- A Similar study may be undertaken to study stress level of the High School students, Student teacher, Arts and science students, Engineering students and Medical students.
- A Similar study may be undertaken to study stress level of the Higher Secondary School students, Emotional intelligence coaching, Yoga techniques, Time management, Personality, Intelligence, Relaxation, Health Management, and Achievement.
- Comparative analysis can also be done among Stress Coping Strategies of the Higher Secondary School, High School, Student Teacher, Arts and Science Students, Engineering Students and Medical Students.
- Effectiveness of stress level on Mental Health and Mental Health Hygienic.**5.5**

CONCLUSION:

It is Concluded that majority of higher secondary school students use examination stress for their stress management. But the Higher Secondary School Students use behavioural stress at the low level. Higher Secondary school student dominant examination stress and behavioural stress. The Higher Secondary School Students should be aware of various emotional competencies and emotional coaching. The Higher Secondary School Students must be able to analysis their SWOT (Strength, Weakness, Opportunity and Threat) analysis. Higher Secondary School Students also trained in solving their interpersonal and intra personal conflict. Stress is a physiological pressure. It can be positively utilized to get the completion of task and achieving goal by the Higher Secondary School Student.

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Appendix

PERSONAL DATA

TOPIC: STRESS LEVEL OF HIGHER SECONDARY SCHOOL STUDENTS

NAME OF THE SCHOOL :
STUDENT NAME :
GENDER :
AGE :
TEACHER NAME :
LOCALITY :
PARENT OCCUPATION :
FATHER :
MOTHER :
NO OF FAMILY MEMBERS :
FAMILY TYPE :
ANNUAL FAMILY INCOME :
STUDYING CLASS :
STUDYING MEDIUM :
STUDYING HOBBIES :
STUDENT AIM :

STUDENTS STRESS RATING SCALE (FINAL FORM)

ED = Every day (ஒவ்வொரு நாளும்), OT = once in 2/3 Days (இரண்டு, மூன்று நாட்களுக்கு ஒருமுறை), OW = once In a week, (வாரத்தில் ஒரு நாள்), OF = Once in Fortnight (15 days) (15 நாட்களுக்கு ஒருமுறை), OM = Once in a Month (மாதம் ஒருமுறை), R = Rarely (ஒரு சில நேரங்களில்), N = Never (இல்லை)

S. No.	FACTOR	STATEMENTS	ED	OT	OW	OF	OM	R	N
1.	FV	I get angry. எனக்கு கோபம் வருகிறது.							
2.	FV	I do not take proper rest. நான் சரியாக ஓய்வு எடுப்பதில்லை.							
3.	F III	I get irritated. நான் எரிச்சலடைகிறேன்.							
4.	F III	I do not share my misgivings (failures) with others. நான் தோல்விகளை யாருடனும் பகிர்ந்துக் கொள்வதில்லை.							
5.	F I	I complain about the past. நான் கடந்த காலத்தை பற்றி புகார் செய்கிறேன்.							
6.	F II	I rush through the day. நான் நாள் முழுவதும் விரைகிறேன்.							
7.	F III	I feel lonely. நான் தனிமையாக உணர்கிறேன்.							
8.	F I	I have the problem of constipation. எனக்கு மலச்சிக்கல் பிரச்சனை உள்ளது.							
9.	F I	I get jealous of others. நான் மற்றவர்களை பார்த்து பொறாமைப் படுகிறேன்.							
10.	F I	I get viral infections. எனக்கு வைரஸ் தொற்று ஏற்படுகிறது.							
11.	F I	I suffer from headaches. நான் தலைவலியால் பாதிப்படைகிறேன்.							
12.	F I	I take long time to recover from illness. நான் நோயிலிருந்து விடுபட நீண்ட காலம் எடுத்துக் கொள்கிறேன்.							
13.	F I	I suffer from diarrhea. நான் வயிற்றுப்போக்கால் அவதிப்படுகிறேன்.							
14.	F I	I find it difficult to sleep. எனக்கு தூங்குவது கடினம்.							
15.	F II	I have difficulty in concentrating on my studies. எனது படிப்பில் கவனம் செலுத்துவதில் எனக்கு கடினமாக உள்ளது.							
16.	F V	I eat fast. நான் வேகமாக சாப்பிடுகிறேன்.							
17.	F II	I worry about my future. நான் என் எதிர்காலத்தைப் பற்றி கவலைப்படுகிறேன்.							
18.	F III	I can’t find time to have fun to enjoy myself. நான் என்னை ரசிக்க நேரம் ஒதுக்குவதில்லை.							
19.	F III	I cry or feel like crying. நான் அழுகிறேன். அல்லது அழுவதுப்போல் உணர்கிறேன்.							

20.	F IV	I feel restless when I have to take a surprise test / Examination. தீடீர் தேர்வு எழுத வேண்டியிருக்கும் போது அமைதியற்றவனாக உணர்கிறேன்.							
21.	F V	I talk fast. நான் வேகமாக பேசுகிறேன்.							
22.	F IV	I get nervous when I forget points that I really know. எனக்கு உண்மையில் தெரிந்த தகவல்களை மறக்கும் பொழுது நான் பதற்றம் அடைகிறேன்.							
23.	F IV	I get depressed after taking an Examination. நான் தேர்விற்குப்பின் மனசோர்வு அடைகிறேன்.							
24.	F IV	My heartbeats increase during examination. தேர்வுகளின் பொழுது என் இதய துடிப்பு அதிகரிக்கிறது.							
25.	F II	I feel tired even though I had enough sleep. எனக்கு போதுமான தூக்கம் இருந்தாலும் சோர்வாக உணர்கிறேன்.							
26.	F IV	I do not maintain my body weight. நான் என் உடல் எடையை பராமரிக்கவில்லை.							
27.	F II	I feel stiffness or pain in my neck. என் கழுத்தில் விறைப்பு (அ) வலியை உணர்கிறேன்.							
28.	F II	I have difficulty in remembering things. செய்திகளை நினைவில் கொள்வதில் எனக்கு சிரமம் உள்ளது.							
29.	F IV	I become tensed with delays of interruptions. நான் தாமதத்தாலோ (அ) குறுக்கீடுகளாலோ பதற்றமடைகிறேன்.							
30.	F III	I enjoy games only when I win. நான் வெல்லும் போது தான் விடையாட்டை ரசிக்கிறேன்.							
31.	F III	No one understand me. யாரும் என்னை புரிந்துக்கொள்வதில்லை.							
32.	F II	My parents scold me. என் பெற்றோர் என்னை திட்டுகிறார்கள்.							
33.	F I	My teachers scold me. என் ஆசிரியர்கள் என்னை திட்டுகிறார்கள்.							
34.	F I	I find myself think of consequences of failing in an examination. நான் தேர்வின் தோல்வியின் விளைவுகளை சுயமாக சிந்தித்தறிவேன்.							
35.	F I	I fail to see the humor in situations there others find funny. மற்றவர்கள் வேடிக்கையாக காணும் சூழ்நிலைகளில் நான் நகைச்சுவையை பார்க்க நான் தவறிவிட்டேன்.							

Note: Factor – I Physiological (காரணி – I உளவியல் ரீதியாக), Factor – II – Emotional Stress (காரணி – II உணர்ச்சி ரீதியாக), Factor – III – Social Stress (காரணி – III சமூகவியல் ரீதியாக), Factor – IV Examination Stress (காரணி – IV தேர்வின் ரீதியாக) & Factor V – Behavioral Stress (காரணி – V செயல்பாட்டின் ரீதியாக).

A Study on Mobile Phone Usage in Relation to Academic Performance among Higher Secondary School Students

Ms L Ramalakshmi

A STUDY ON MOBILE PHONE USAGE IN RELATION TO ACADEMIC PERFORMANCE AMONG HIGHER SECONDARY SCHOOL STUDENTS

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Chapter I

Introduction

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION:

Mobile phones have become an integral part of our daily life. This device contributes to student's learning and improves academic performance. With smartphones activities such as online information retrieval, file sharing, and interacting with professors and fellow students are possible. Research suggests that many students use it as leisure device, and pursue social networking, surfing the Internet, watching videos, and playing games. If typically utilized for leisure rather than education, then cell phones may disrupt learning outcomes. Thus, analyzing the actual relationship between cell phones use and academic performance becomes important.

Intensive cell phone usage by school students results in decline in academic performance and development of negative behaviors in them. Thus, the aims of the current study are to determine influence of the mobile phone usage on academic performance among higher secondary school students.

Globalization has changed our lives from the era of communicating through pen and paper to communicate effectively through advancements in Information and Communication Technologies (ICT). According to Ling (2004), mobile phones have become an almost essential part of daily life since their rapid growth in popularity in the late 1990's. According to Haruna et al (2016), mobile phones are the most necessary medium of communication for adolescents. It has virtually affected the society's accessibility, security, safety and coordination of business and social activities and has hence become a part of a culture of the whole world.

A basic mobile phone is regarded as a pocket-sized device which has telecommunication capabilities that stores contact information, possesses text messaging features and keeps track of appointments as well as setting reminders. Mobile phones vary in design with basic models allowing students to have access to each other simply by phone or text on the go (Wood, 2006). More complicated mobile phones present a better variety of abilities such as video, camera, audio recording, multimedia messaging and internet access (Livingston, 2004).

Mobile phone technology is a necessity in a student's life and also an important technological device to them. They are basically used for making and receiving calls, text, and picture messaging and accessing the internet. Today's students are extremely competent in the use of mobile phones (Hay Thornthwaite & Andrews, 2007). Students consider these devices as a pleasant, individual possession in which no other device is observed.

Mobile phones are also seen as a trendy accessory that suits students' individual needs often expressed choice of mobile wallpaper, ringtones, phone covers and other fashion accessories (Attewell, 2005). University students use mobile phones far more often than desktop computers and even laptops. This implies that mobile phones can be an even more significant learning tool and a typically raised area in the near future (Kimura, 2011). Therefore, mobile phone technologies can support students in their learning by exploring their world through these technologies.

1.2 HISTORICAL BACKGROUND OF THE CELLPHONE

The History Behind the Invention of the First Cell Phone Rosenfeld Media/Flickr While cell phones are a fairly modern invention if you consider 1973 ‘modern ‘the idea of a telephone that could travel with you is as old as the telephone itself. For decades though, the best anyone could offer were bulky two-way radio devices that were essentially walkie-talkies that filled the trunk of your car, but a couple of key engineering developments and a classic American business rivalry would help lay the foundation for the device that revolutionized the way people communicate.

1.3 EARLIEST MOBILE COMMUNICATIONS DEVICES

Since the turn of the 20th century, people have envisioned a world where they would be able to keep in constant communication with each other, free of the restriction of wires and cables. With the introduction of radio communications in the early 1900s, and landline telephone services becoming more commonplace at the time, it wasn’t hard to see why people would think that the invention of real mobile phones as we know them today would happen much sooner than it did.

1.4 RELATED: THE WORLD AT YOUR FINGERTIPS: A BRIEF HISTORY OF MOBILE DISPLAY TECHNOLOGY

For most of their history, mobile phones were mostly two-way radios that you installed on something that moved. In the 1920s, the German railroad operators began testing wireless telephones in their train cars, starting with military trains on a limited number of lines before spreading to public trains a few years later. In 1924, Zugtelephonie AG was founded as a supplier of mobile telephone equipment for use in trains, and the following year saw the first public introduction of wireless telephones for first-class passengers on major rail lines between Berlin and Hamburg.

The Second World War saw major advances in radio technology, with handheld radios coming into widespread use. These advances placed mobile radio systems in military vehicles around the same time, but technological limitations limited the quality of the systems significantly. This didn't stop companies from offering mobile telephone systems for automobiles to the public in the 1940s and 1950s in America and elsewhere, but like their military counterparts, they came with serious drawbacks. They were large systems that required a lot of power, had limited coverage, and the networks weren't able to support more than a few active connections at a time. These limitations would hamper mobile phone technology for decades and put a ceiling on how fast the technology could be adopted by the public.

1.5 MAJOR DEVELOPMENTS TOWARDS MODERN MOBILE PHONE SYSTEMS

In response to this growing demand for better mobile telephony, AT&T's Bell Labs went to work developing a system for placing and receiving telephone calls inside automobiles that allowed for a greater number of calls to be placed in a given area at the same time. They introduced their mobile service in 1946, which AT&T commercialized in 1949 as the Mobile Telephone Service. The service was slow to take off, however, with only a few thousand customers in about 100 localities in total. The system required an operator at a switchboard to set up a connection and the users had to push a button to talk and let go of it to listen, making it more like a military radio than the existing telephone system that people were used to, only wireless. The service was also expensive, and the number of channels available for active connections remained limited, to as little as three channels in some places, and with a conversation taking up the entire channel for the duration of the call, there could never be more active conversations than there were available channels.

Bell Labs engineers were working on a new system that could improve the efficiency of these channels since the 1940s, however, with Douglas Ring and W. Rae Young proposing the idea of a network of 'cells' to help manage the reuse of channels and reduce interference as early as 1947 [PDF]. The technology just wasn't there at the time, however, and it would be another couple of decades before a pair of Bell Labs engineers, Richard Frenkiel and Philip Porter, would build this concept of cells into a more detailed plan for a mobile telephone network for automobiles. By this time, AT&T had already pushed the Federal Communications Commission to make more of the frequency spectrum available for radio telephones to use, providing more channels for them to use. Other significant developments in the 1970s enabled automatic cell switching and signaling systems that allowed for devices to maintain a connection as they moved from one cell to another, expanding the area that mobile telephone networks could service. But all of these developments were put to use developing mobile phones in automobiles. It would take an upstart to give us the first cell phone as we know it today.

1.6 MOTOROLA'S MARTIN COOPER INVENTS THE FIRST CELL PHONE

While Bell Labs was working to develop the system that would become the cellular networks, we are all familiar with, what they weren’t having as much success in was in building an actual portable, handheld telephone. They had spent much of their efforts developing what we used to call the car phone--though not anymore since those aren’t really a thing. The reason the car phone didn’t take off was because of the work of a small company called Motorola and a man named Marty Cooper. “We believed people didn't want to talk to cars and that people wanted to talk to other people,” Cooper told the BBC in a 2003 interview, “and the only way we at Motorola, this little company, could prove this to the world was to actually show we could build a cellular telephone, a personal telephone.” Build it they did. With encouragement from his boss, Motorola’s chief of portable communication products John Mitchell, Cooper and engineers at Motorola produced the working prototype for the first cell phone. On April 3, 1973, before stepping into a news conference in Manhattan to demonstrate the new device that would go on to revolutionize communications, Cooper placed the first cell phone call in history. “I called my counterpart at Bell Labs, Joel Engel,” Cooper said, “and told him: ‘Joel, I'm calling you from a “real” cellular telephone. A portable handheld telephone.’ Beating AT&T to the punch was a thrilling experience for the upstart Motorola, then taking on a company that exercised monopoly power over American telephone systems. “When you are a competitive entity like we were,” Cooper said, “it's one of the great satisfactions in life.

1.7 THE INVENTION OF THE CELL PHONE WAS A MULTI-GENERATIONAL EFFORT

While demonstrated in 1973, it would be another decade of development before Motorola’s cell phone-the world’s first-made it to market, and commercial cellular service for handheld cell phones began. Selling for about $3,500 at the time, no one-not even Cooper-could see Motorola’s DynaTAC 8000x being the first step on the road to the kind of communications revolution to come. “I have to confess that [the widespread global use of cell phones] would have been a stretch at the time and in 1983 those first phones cost $3,500, which is the equivalent of $7,000 today,” Cooper said in 2003. “But we did envision that someday the phone would be so small that you could hang it on your ear or even have it embedded under your skin.”

As for whether Cooper accepted the title given to him by history, the father of the cell phone, he felt that the honor should be shared. “Even though I conceived of it,” he said, “it really took teamwork and literally hundreds of people ended up creating the vision of what cellular is today, which by the way is not complete. We are still working on it and still trying to make it better.”

1.8 THE MEANINIG AND DEFINITION OF MOBILE PHONE

A mobile phone is a wireless handheld device that allows users to make and receive calls and to send text messages, among other features. The earliest generation of mobile phones could only make and receive calls. Today’s mobile phones, however, are packed with many additional features, such as web browsers, games, cameras, video players and even navigational systems. A mobile phone may also be known as a cellular phone or simply a cell phone.

1.9 STUDENTS HAVE CELL PHONES IN SCHOOL

There’s no easy answer: there are both pros and cons to students having cell phones in school. Although they can be used as a learning tool in the classroom, this only works as long as students use them effectively. This means for teachers who decide to use cell phones (or any other digital device) as part of their lessons, it’s important to set ground rules and keep a close eye on how they are being used.

1.10 MOBILE PHONE USE – A TEACHER’S PERSPECTIVE

As for what teachers think about including the use of mobile phones in their lessons, one US study looked at nine teachers’ attempts to incorporate various technology devices in their lessons. The study, Teaching and learning with mobile computing devices from 2015 details the experiences of one Mathematics teacher, Steven, who uses an iPhone in class. ‘Steve used his own iPhone to document students’ work and attendance,’ the study says. ‘He uploaded scanned tests, quizzes, assignments, and photographs into a web-based software application called Evernote. Each of his students [primarily 9th and 10th graders] had a file in this program … this was helpful to Steven when conducting formal and informal parent-teacher conferences and also when discussing with other teachers and administration. ‘Steven enjoyed the flexibility of mobile devices by holding class in locations other than his classroom, such as the auditorium and outside [and] he could use his iPhone to “pull up every document [he’s] ever scanned in and get a much bigger, much more accurate picture” of a student’s progress.’ Although participants in this study say using a mobile device in the classroom involved the need for exploration and a lot of personal research, the authors suggest that with the growing trend of BYOD, schools should consider integrating mobile devices into lesson plans.

1.11 IMPACTS ACADEMIC PERFORMANCE OF STUDENTS

This is the first and the foremost negative impact associated with the excessive use of mobile phones or sophisticated versions on smartphones. The academic performances of students can get impacted very badly. You get easily distracted and carried away by instant chats, memes, watching Facebook and downloading apps. This can invariably have its own set of consequences when it comes to achieving robust performances in academics. There are students who download educational apps too to help them cope up with their studies in a better manner. But how many of you are interested in class-related tutorials?

- **Indulge in pornography**

As mobile phone devices come to you with an open-ended email access system, there are students who indulge in various forms of misconduct too. Teenagers download porn videos or scintillating audio clippings too. What is more? These can easily be circulated via Face book messenger, what’s App and Snap Chat. Other students get an easy access to sexual sites and porn stuff. Again, this can leave a detrimental impact on the healthy well-being of society. Today, teenagers involving themselves in the gang rape of even smaller girls, are on the rise. Thanks to innovative technology and mind-boggling videos.

- **Lose out on age-old values**

This is a major impact of mobile phones on students’ life. Again, you tend to lose-out on traditional values and age-old traditions when you are exposed to I-phones, I-pads, and mobile tablets. Yesteryear kids used to read epic books on Ramayana, Mahabharata or even the Bible. Today’s kids enthrall themselves with Batman, Spiderman, Cinderella Princess, and other Western-Age Disney characters. The advent of mobile phones and wide-spread usage of these have literally made us kill our rich cultural and diversified heritage.

- **Anti-social activities- on the rise**

As mobile phones and data devices have come to each and every household, one can easily say that terrorism is on the rise. Anti-social militants just change multiple SIM cards to unveil their area of operations. In terms of where to plan a serial bomb blast, where to plan Cyanide based blasts and so on. Exchange of anti-social IP addresses is made hassle-free with exposure to mobile phones and smart-phone devices. As students get easy access to money, they indulge themselves in terrorist activities as well. Data hackers too stalk innocent victims or can steal confidential banking details of innocent people. Cyber-crime and anti-social activities are definitely on the rise, with easy access to cell phones or mobile tablets.

- **Class-hours getting disrupted**

In schools or colleges, you find students secretly carrying their cell phones or mobile tablets. These keep buzzing. Else your phones keep ringing. This can disrupt the class hours. Teachers or College professors are unable to continue with their classes when phones keep ringing continuously. As for students, they keep looking at each other and distract themselves with what is happening in the class. Even the brighter students end up losing out their grades when this happens.

- **Easy access to copying answers during examinations**

Again, easy access to multi-faceted technology is destroying our creative bent of mind. Students copy answers through micro links. They hardly want to study hard for their exams. In the name of looking at the watch or having a God’s idol as the display picture, they can easily copy answers or even circulate these to other students. Wide-spread copying of answers is again becoming a negative foray into students’ lives. They hardly realize that they can be debarred from appearing in further examinations or cracking competitive tests when they get caught.

- **Leads to hard-core vision problems**

A lot of moms are proud to see their sons or daughters juggle between various apps on mobile phones or smart-phone tablets. They proudly reveal to the relatives as to how intelligent and brainy their kids are. Not many of us realize the fact that continuous viewing of mobile phones can lead to serious vision related problems. Perennial eye-infections, lazy eye and cylindrical issues rise among students who are just in their first grades.

- **Series of health problems**

Most of the smart-phones emit radiation as against user-friendly LED screens. This can have a series of health hazards apart from eye-infections alone. Quite a lot of us put the hands-free while listening to news clippings, watching videos or listening to music. For students and grown-up adults, this can impact the delicate tendons, situated near the ear-drum. Quite a lot of teenagers buy invisible hearing-aids to combat this particular issue. Radiation impact can also lead to blockage of heart, cirrhosis and coronary disorders. Cancers can also be caused when you are exposed to radiation over-time.

- **Increased social security- a good sign**

Again, though a lot of negative effects have been stated in the blog write-up, you get certain benefits too. Students who carry their cell phones and use it optimally are here to gain. They can call their parents or elders at home; in case they are faced with emergencies. GPS enabled mobile devices can also help parents know where their kids are. Again, this can prevent unforeseen situations.

1.12 CELL PHONES IN THE CLASSROOM: LEARNING TOOL OR DISTRACTION

These days, more and more students are bringing cell phones to class. Even elementary school-aged students have cell phones in their pockets and backpacks. However, the news of

Ontario’s decision to ban cell phones in classrooms opens again the debate about whether or not students should have cellphones in school. It also brings up the question of whether it’s possible for technology to exist in the classroom as a learning tool—rather than simply a distraction.

1.13 CELL PHONE USE IN THE CLASSROOM

Students check their phones in the classroom an average of more than 11 times a day. That can add up to a lot of time spent distracted from schoolwork. And when students are distracted, it’s a recipe for extra stress, frustration, and catch-up time for everyone. With students spending up to 20% of their in-class time texting, emailing, and checking social media, it’s no wonder the debate about cell phones in the classroom is alive and well. Students check their cell phones in the classroom more than 11 times a day.

1.14 EFFECTIVE USES OF MOBILE PHONE IN THE CLASS ROOM

If properly managed, cell phones can be used as tools to help children learn in the classroom. The following are some of the pros of allowing cell phones in school:

- **Using educational learning apps**

Cell phones give students access to tools and apps that can help them complete and stay on top of their class work. These tools can also teach students to develop better study habits, like time management and organization skills.

- **Incorporating digital platforms into lessons**

Using social media can keep students interested in class and encourage them to participate in the discussion. Some teachers create twitter hashtags or message boards students can use during class discussions to share thoughts and ideas. This can be especially helpful for students who might not be comfortable speaking in class.

- **Supplementing lessons with digital materials**

Teachers can take advantage of cell phones by providing students with resources to find more information about a topic. This can include videos, news stories, online discussion groups, and more. Allowing students to access these resources in class can help encourage participation and discussions.

- **Providing easy access to more information**

Cell phones can give students access to more information, letting them research more about a topic while having class discussions. This is especially true for current events that have not yet been covered in school textbooks.

1.15 THE DRAWBACKS OF ALLOWING CELL PHONES IN CLASSROOMS

While cell phones can be used as learning tools, it is a challenge to make sure students are using them for school-related tasks. A cell phone can easily turn from “classroom learning tool” into “classroom disruption”. Cons of allowing cell phones in school include:

- **Distractions and interruptions**

When students use their cell phones to check social media and text their friends in class, it leads to distractions for those students as well as for their peers. This can cause disruptions in class, particularly if the teacher is constantly telling students to turn their devices off.

- **Cyberbullying**

Cell phones can also lead to increased problems with bullying on the schoolground. Cyberbullying can be harder to see than other forms of bullying, making it difficult for teachers to identify and stop when it is happening.

- **Cheating**

Cell phones can be a helpful learning tool in class. But they can also be used by students to access information while taking a test, leading to cheating. Even if a student isn’t caught, this can lead to him or her having a poor understanding of the material in the future, and is unfair to students who studied hard to do well.

- **Disconnection from face-to-face activities**

While cell phones can help encourage participation by offering different channels, this can also lead to less in-person discussion and fewer learning opportunities. Learning to work together with others is an important part of students’ education, and can be lost with too much dependence on cell phones and other digital technology.

1.16 A REVOLUTION IN THE CLASSROOM:

- **Check facts**: probably the most common use of all. Both students and teachers can now find facts within seconds. This can be very useful when explaining and debating topics.
- **Take photos**: mobile phones can be used as cameras to illustrate work and presentations.
- **Make videos**: similar to the last point. For example, videos can be used to record experiments and later include them in projects.
- **Carry out tests**: this is probably one of the most interesting and revolutionary uses of the mobile phone in the classroom. Students can now take quizzes and tests on their mobile phone that were created earlier by their teacher. In this way, teachers can gain valuable real-time insight into the knowledge of their students and the effectiveness of their teaching. To implement this technique now, download the ExamTime Mobile App for iOS or Android.

- **Read the news**: many teachers often include news articles as part of their teaching methods (for example, in Economics). With an endless amount of news gathering mobile applications, you can bring news and current affairs into the classroom in an instant.
- **Dictionary:** there are a multitude of dictionary applications that allow you to check the meaning of a word instantly.
- **Translator**: again, this can help with meaning and explanation of a foreign word just like the dictionary application.
- **Calendar**: no more forgetfulness or confusion about exam dates or submission deadlines. Now you have applications that allow you to synchronize calendars.
- **Write down ideas**: inspiration doesn't always come when we want it to. For that reason, try using your mobile device. Smartphones allow us to take down notes any time, any place.
- **Listen to music**: we have spoken before at length about how music helps us to study. Additionally, you do not need to store your songs if you use services such as Spotify or Soundcloud.
- **Images:** as you well know, a picture is worth a thousand words. For this reason, in many cases, students find it easier to understand material when there is an image related to an explanation. Mind Maps are a good example of a tool that helps in this regard.
- **Review**: smartphones allow you to access resources and material quickly before an exam. Don't forget to sign up with ExamTime online and then download the official app for Android or iOS.
- **Stopwatch/timer**: classes, exercises and presentations often come with time limits. Practice your time management by using your mobile phone's stopwatch.

- **Read eBooks**: when learning, applying for a job position or going to University, reading PDFs and manuals can be mandatory. For this reason, applications like Kindle allow us to read books and manuals from anywhere.
- **Voice Recorder**: mobile phone provides students with the ability to record explanations. These recordings can be referred to later on and can save a great deal of time instead of writing. In these cases, always remember to get permission from the teacher first.
- **Discover related subject material**: among many other functions, the ExamTime App lets you search through more than one million study resources created by other ExamTime users.
- **Document scanner**: although it does not offer the same quality as a traditional scanner, the camera of a mobile phone can serve as a scanner. Some teachers even support the delivery of class work through photos (for example, Math exercises).
- **Calculator:** there are numerous applications that enable you to perform all the operations of a scientific calculator. This helps reduce the number of items students must carry in their bags.
- **Edit videos**: not only can we make videos, but we can also edit them, add text, filters, effects and more.
- **Edit pictures**: the same can be done with images as with videos.

1.17 POSITIVE EFFECTS OF MOBILE PHONES ON STUDENTS FACEBOOK TWITTER LINKEDIN EMAIL

Many would argue that mobile phones are impacting students in a negative way. But is that really true? Indeed, the prevalence of mobile phones has started the debate on the negative aspects of this technology on students. However, the advantages of using mobile phones are too many to deny. Students are introduced to a wide range of apps and features that can transform the way they study. Various features available on mobile phones can help them in enhancing their skills and boosting their grades. Indeed, some caution is needed when students use mobile phones. When used right, mobile phones can have many major positive effects on students, including the following:

1. Instant Communication

When you think about how cell phones have changed our lives positively, the immediate answer would be improved communications across the globe. Students nowadays can easily interact and connect with their family, friends and teachers instantly. Students have a wide range of options to call and text. Aside from traditional calling and texting from phones, different apps now offer instant calling and texting, including Facebook, Instagram, Snapchat and more. These platforms even have the option of video call and audio messages, which has definitely enhanced the communication process, thereby aiding students' academic and social life. The use of emojis has also reduced the element of misunderstanding in messages and texting options. Even if a student can't reach someone on call, they can still send them a video or audio message.

2. Entertainment

There is clearly a major impact of smart phones on our lives, especially when it comes to entertainment. Phones have become a means of unlimited entertainment for students, which helps them reenergize. After a day full of lessons and assignments, they can easily reduce their levels of stress by entertaining themselves through their phones. From latest movies, TV shows, to interactive games, as well as music, they have everything on their fingertips. There are many entertainment sources that can be both educational and fun. Many games help in enhancing various skills of the students that they can implement in their daily lives as well.

Read more about phone addiction: side effects of mobile phones on students, phone addiction test, smartphone addict, phone addiction study, and phone addict.

3. Academic Help

Among the many positive effects of smart phones on children, getting quick help in their academics is one of the most crucial ones. Students nowadays can easily look up any information they need for any subject on their mobile phones. Smart phones are equipped with the latest operating systems that often include educational apps. Moreover, a quick Google search is all they need to get the right information to help with their studies. While many of the sources include inaccurate information, students nowadays are well aware of this fact and make sure to look up various different sources to check the accuracy of the information they have gathered. In case of any confusion while doing their homework assignment, they can clarify it that very instant. This increases their knowledge about their subject matter and helps them get better grades.

4. Increased Convenience

It is incredible how smart phones have changed society, especially in terms of convenience. There is no doubt about the increased convenience that students enjoy due to the usage of smart phones. Today, students can contact their friends, their parents, their teachers, order food, look for part time jobs, book cabs and do so much with just a few clicks. This saves them time. which they can invest in their studies instead. Instead of spending time browsing through the many books in a library and find the right information they need, students can access a ton of academic sources right from their room with the help of their mobile phones.

5. Availability of Greater Technology

The many positive effects of technology on children include the wide variety of useful features in their hands. Mobile phones give them an option to install useful apps that can assist in their studies, gather relevant information, and much more. It makes way to a digital learning experience in classrooms, as students can have the lectures, class discussions, and assignment briefs directly on their phones. They can easily access any article, video, or other information as needed. Besides this, the students can even self-teach themselves various skills and hobbies. For instance, learning a new language, cooking a new dish, drawing technique, or enhancing their public speaking skills by making and uploading a video.

6. Enhanced Security

The biggest positive impact of mobile phones in daily life is increased personal security. Many parents strongly believe that cell phones ensure that their children are safe since they can instantly call 911 or them in case of emergency. While students might not view their mobile phone as a security device, it is still what they would use when they need help. This is what many believe is the biggest advantage that this technology has to offer. Aside from this, syncing accounts also help parents keep watch over the location of their kids. It gives them a sense of relief knowing they can immediately find out where their kids are when needed.

7. Boosting Memory

Mobile phones can also work as a memory booster for students. During lessons, it is typically not possible to take notes of each and every thing. Therefore, students can use their phones to their advantage. They can capture the images of figures or diagrams shown by their teachers, voice record the explanation of a complex problem, record a science experiment for future reference, and take quick notes in case they don’t have a notebook. This is one of the most effective positive effects of mobile phones as students can always refresh their memory before a class test, exam or an assignment through the things they captured in their phones.

8. Increased Organizational Skills

The positive effects of mobile phones on youth include an increase in their organizational skills. Mobile phones come with apps that help students get more organized with their studies. Useful apps that help students with their organizational skills include Keep Notes, stop watch, calendar, encyclopedia, alarms, recorder, Google Maps, Google Drive, Office and more. Students can take notes, send and receive important documents, consult the encyclopedia or dictionary, record lectures, and do so much more to keep on top of their studies.

9. Aid in Group Projects

The many positive effects of smart phones on education include making it easy for students to communicate with their classmates and friends, especially in group projects. This means even if someone is unable to attend the group discussion in person, they can still become a part of it virtually. Applications like WhatsApp and more have video calling features through which students can connect with each other. Aside from this, viewing and sending documents and presentations to one another is easy with mobile phones. It also allows them to work on a document together online. Even staying home, students can still easily work on group projects.

10. Adapting to Modern Society

The many benefits of technology can be determined by how cell phones have changed our lives. The ever-changing technology has transformed all aspects of society. We have entered a modern society which is incorporating latest technologies to aid everyone. By using mobile phones, students are learning to adapt to this modern society. They are learning the best and fastest ways of finding solutions to their problems. It helps them use their creativity skills to come up with innovative ideas. Since mobile phones are being used in all professions, their regular usage is assisting students to familiarize themselves to modern technology which would help them in their careers later on.

11. Navigation Assistance

The positive influence of mobile phone in our life cannot be denied. This technology comes with navigation systems which ensure that not just the students, but adults, too reach their destinations easily and safely without any chances of getting lost. Instead of getting lost, getting misguided directions from others, students can easily access the navigation on their phones. This helps them in finding the accurate direction, and also the best possible route to take to reach their destination. This has improved transportation issues for students, enabling them to reach their schools on time. The navigation assistance tool also helps them locate the right libraries, cafes, book stores, stationary store and whatnot to aid with their education.

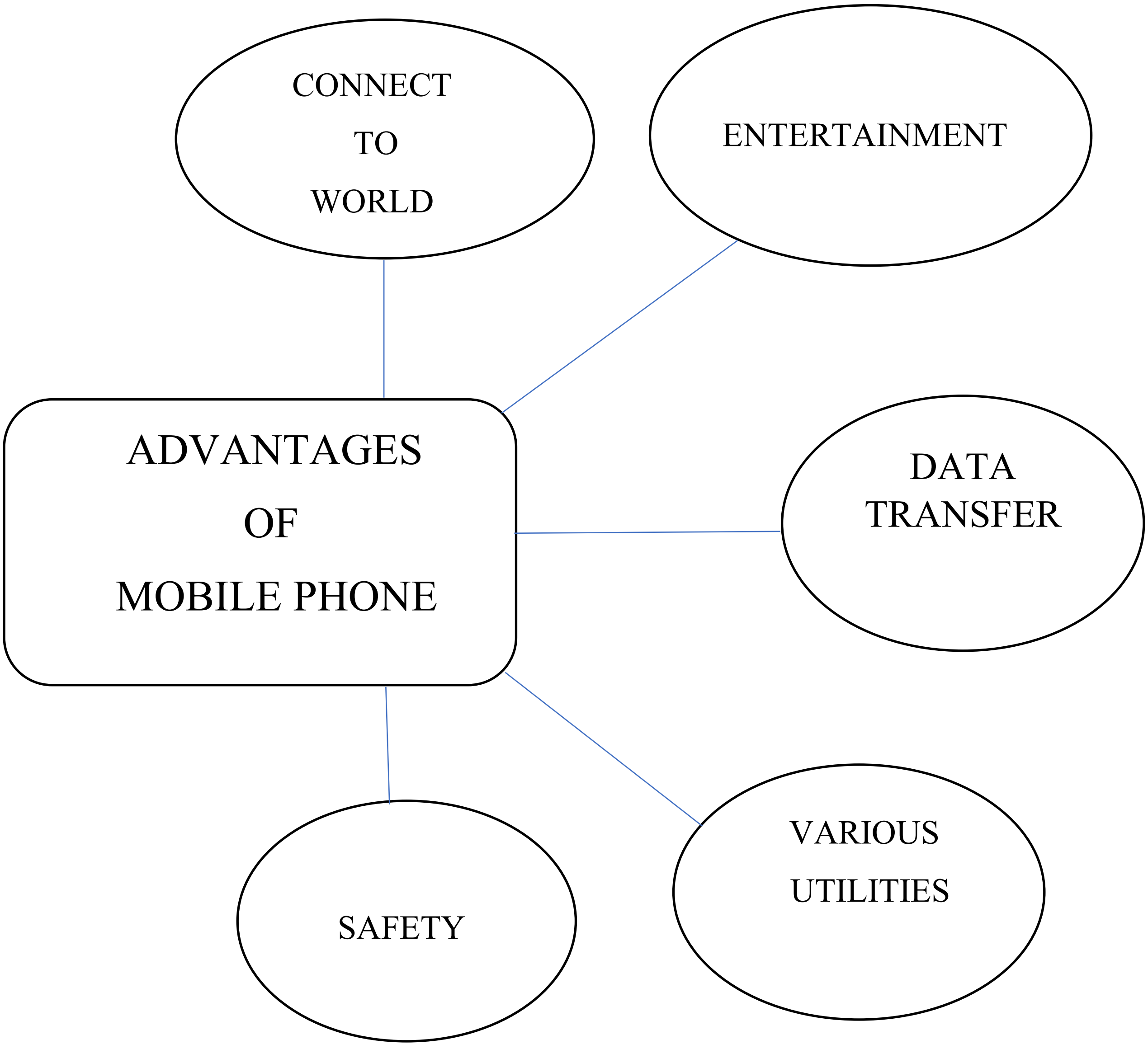
12. Time Management

One of the major effects of smart phones on students is that it enhances their time management skills. It allows students to keep a check on time, be punctual for their lessons, and also manage their assignment tasks accordingly. The clock, calendar, and alarm feature on mobile phones enables them to set reminders about important dates like assignments deadlines, class tests, group discussions and more. Using a mobile phone, students can stay on top of their academic activities and improve other aspects of their lives through proper time management.

1.18 ADVANTAGES OF MOBILE PHONES

The advantages of mobile phones make them fundamental accessories if not necessities. There are several economic and social advantages as explained below.

Fig 1.1 ADVANTAGES OF MOBILE PHONES



- **Connect to the world**

Mobile phones technology made and still makes the world a small village. With one of them in your pocket, if it is on, you can connect with friends, family or even make new friends around the globe. Thanks to calling ability, texting, video calls, chats, and the event full social media, you will remain connected if you wish.

- **Entertainment**

From the most known Nokia Snake game to the newest fun games, it is almost impossible to get bored while you have a mobile phone in your pocket. There are many crossword puzzles games to keep you busy entertained in addition to thousands of online and offline games applications. Additionally, kids have the opportunity to enjoy cartoons and games on these mobile devices.

- **Safety**

Regarding the case on advantages and disadvantages of mobile phones, advantages accrued from having a phone go much behold the intentional ones. When traveling or going for a hike, your mobile phone offers entertainment and company. But think of it as a safety gadget. When you forget your direction back home or even get hijacked, a mobile phone GPRS can help you trace your way home or help authorities to locate you respectively. Lastly, if any emergency situation happens like an accident or a car breakdown, you can call for rescue or help.

- **Alarm & reminder**

You can manage a to-do list using your mobile phones reminder option. Additionally, if you are planning to wake up early in the morning, you can set the alarm with a volume and notification sound of choice. This will help you wake up early enough and avoid being later for your meeting, class or any scheduled activity.

- **Data transfer**

At the current age, with a mobile phone, you do not have to send your credentials, video, photos or even document through the post office anymore. With a few buttons presses or screen touching, your data transfer will be sent and received within a few seconds across the globe.

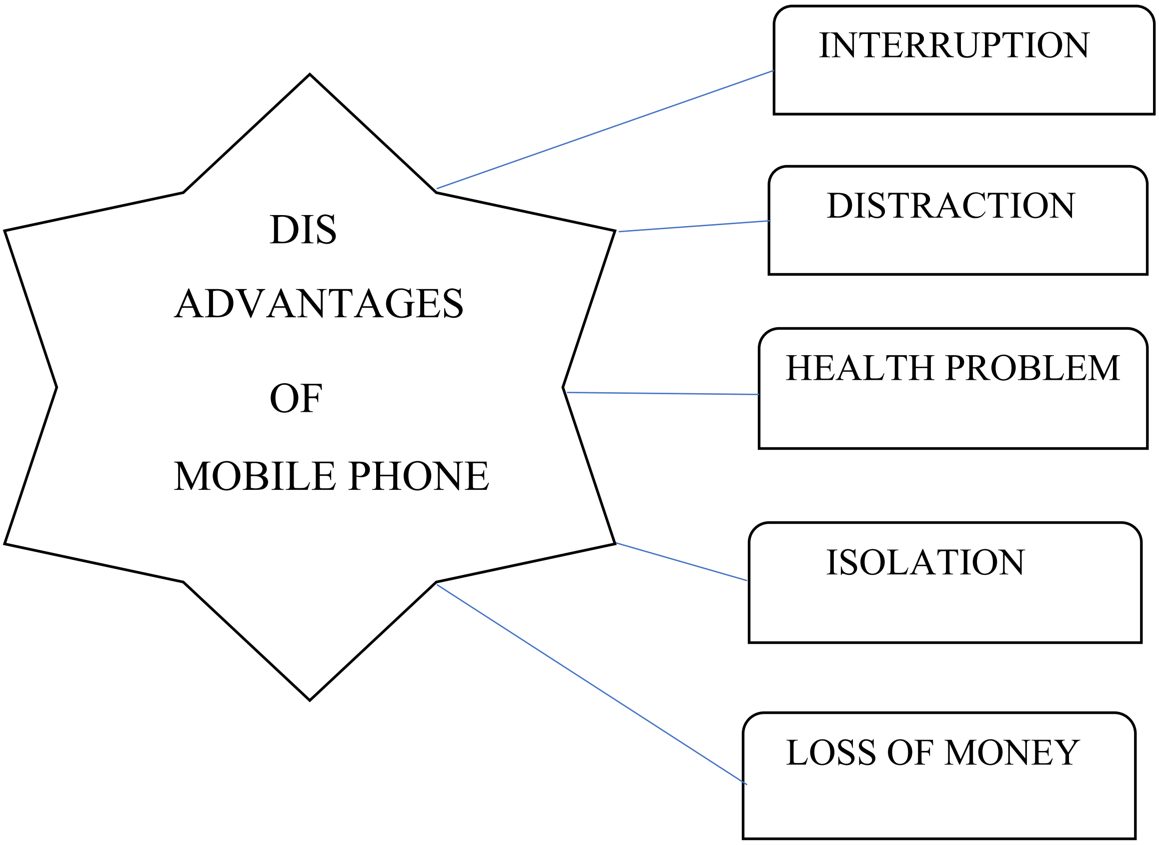
- **Various utilities**

Your phone is not only a call, entertainment or data transfer gadget. There are other utility tips of these devices. A mobile phone can act as a torch, a recording device, data storage, calculator, calendar, camera, and many other utility features.

1.19 DISADVANTAGES OF MOBILE PHONES

The term mobile phone encompasses cell phones and smartphones. They might seem indispensable communication gadgets but below are some of the disadvantages attached to their usage.

Fig 1.2 DISADVANTAGES OF MOBILE PHONES



- **Interruptions**

Mobile phones are a constant, always available, and real-time communication avenue. Incoming calls, emails, texts or social media-related notification get into your phone a few seconds after being sent. It is a convenient thing but how about all those ringing and notifications when listening to a manager or CEO in a business meeting? That sound does not interrupt you alone but also the speaker and other members in the room. It does not end there; mobile phone interruptions happen at weddings, family gatherings, movie theatres or offices. It is not only an annoying but also a frustrating happening.

- **Distraction**

How could distraction to not be among the disadvantages of mobile phones? By mobile phones creating a real-time communication avenue, the compelling feeling to make calls, text or even video calls while driving or working is very distracting. This does not only come as a detrimental effect on work or class productivity. The Centers for Disease Control and Prevention (CDC) say every day close to nine people die in road accidents caused by a mobile phone-distracted driver.

- **Isolation**

Its true mobile phones make people connected and the world a small village. But if not used carefully, it can isolate you from family and people around you. One of the typical negative impacts is where you meet a group of youths seated around a coffee table but not talking to each other; all are glued to their cell or smartphone screens. Additionally, if a teenager or a partner is too much into their mobile phone, this can hurt their relationship with the family or partner respectively.

- **Health problems**

Late night chats and mobile phone games playing on bright screen results to eye problems. On a different note, network waves can result in some skin cancers. If you decide to scrutinize the disadvantages of mobile phones usage, there are even more. Eye cancer, sleeplessness which causes chronic fatigue during the day, and infertility related to Wi-Fi connectivity are among the worries.

- **Loss of money**

Being a mobile phone enthusiast, trend and fashion lover will leave you minus a considerable amount of money maybe every three to six months. You want to have that latest brand, that new and nice-looking phone accessory; all result in debits to your pocket. Not to forget airtime credit and internet charges every day.

The Final Thought

With all that said and done, the way you utilize your mobile phone matters. If used wisely, a mobile phone can be one of the best gadgets you will ever hold. You can use it to benefit your life profitably. Don't let the disadvantages of mobile phones discourage you, it's a matter of choosing how best can it benefit you.

1.20 Significance of the Study

This study will enlighten the real scenario of mobile usage by the higher secondary school students. This study will help the educational administrator to plan for suitable protective measures for making the students away from the cell phone. Government policies and code of contact for the student behavior should be planned regarding mobile usage.

1.21 Need of the study

Higher secondary students are in pre-adolescent period-a period if stress and strain. In this modern world, where the mobiles phones pivots even a layman’s life its impact on higher secondary students’ academic achievements needs studied. Like the two-sided coins mobile phones have got both advantages and disadvantages. This study helps to reveal the role played by mobile phones in higher secondary school students’ academic performance.

1.22 Statement of the problem

A study on **mobile phone usage in relation to their academic Performance among higher secondary school students**.

1.23 Operational definition

Mobile phone usage

1. The score assessed through Mobile phone usage questionnaire.
2. Performance of the student in SSLC examination is taken as an academic performance.
3. The students studying in 11th standard is taken as sample.

1.24 Objectives of the study

1. To **identify the relationship** between mobile phone usage and its academic performance.

2. To **Assess the level** of mobile phone usage of higher secondary school students.

3. To **identify the relationship** between mobile phone usage and its subsample.

4. To **find the predicator** of mobile phone usage.

1.25 Hypothesis

1. The mobile phone usage of academic performance is **high** in higher secondary school students.

2. The mobile phone usage is **high** in higher secondary school students.

3. The mobile phone usage has **no relationship** on academic achievement.

4. There is **no significant relationship** between subsamples and mobile usage in Higher secondary school students.

5. There is **no dominant** mobile phone usage in higher secondary school students.

6. There is **no predictor** of mobile phone usage in higher secondary school students.

1.26 Methodology

The successful outcome of a research is mainly depending upon the proper selection of the research tool.so the researcher used **Normative survey method** in her research.

[a] TOOLS USED

Mobile phone usage questionnaire is constructed and standardized by the researcher and guide. The scale contains 33items in five-point scale. The scale has four dimensions like personal, educational, communicational and hobbies.

[b] POPULATION

The students studying higher secondary schools situated in cuddalore district are considered as population of the study.

[C] SAMPLE OF THE STUDY

The 180 higher secondary school Students from government schools, private schools, and Aided school in cuddalore district were chosen for sample collection. The respondents were randomly selected from each school **[RANDOM SAMPLING TECHNIQUE**]

[D] Statistical Techniques Used:

The following statistical techniques were used for analysis and interpretation of data.

Descriptive analysis

1. Measure of central tendency (Mean).
2. Measure of variability (Standard Deviation)

Inferential analysis

1. ‘t’ test
2. ‘F’ test

Multiple correlation analysis and Regression analysis

1.27 LIMITATION OF THE STUDY

1. There are many methods for measuring the Mobile Phone usage of higher secondary schools' level. Mobile phone usage questionnaire is used.
2. The sample was collected from higher secondary school students.
3. The sample was collected from Cuddalore District.
4. Samples are taken from government, aided and self-financing schools.
5. Data collected both in Tamil and English medium.

1.28 CHAPTERIZATION

Chapter II contains a Review of Related Studies. The Methodology is given in chapter III which contains the Description of the Tools, Population, Sample selection and the Statistical techniques used in this study. Chapter IV contains the Analysis and Interpretation of the Data with the Summary of Important Findings and the discussion of the Result. Suggestions for the further work and Conclusion are given in Chapter V. Bibliography follows Chapter V and the Appendix containing copies of the tools follows the Bibliography.

Chapter II

Review of Related Literature

CHAPTER – II

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

A study of review of literature is very important step, not only in finding a problem but also in the formation of hypothesis and in the selection of methods and tools to be employed in the interpretation of results. A familiarity with the literature in any problem area helps the student to discover what is already known, what others have attempted to find out and what problems remain to be solved. Moreover, a brief analysis of related literature is also helpful for the investigator in giving future suggestion by avoiding duplication. So, the study related literature plays a vital role in the field of research in education.

The importance of reviewing studies made earlier in one's field of investigation need not be overemphasized. A literature review is an account of what has been published on a topic by accredited scholars and researchers. Occasionally you will be asked to write one as a separate assignment (sometimes in the form of annotated bibliography), but more often it is part of the introduction to an essay, research report, or thesis. In writing the literature review, your purpose is to convey to your reader what knowledge and ideas have been established on a topic, what their strengths and weaknesses are. As a piece of writing, the literature review must be defined by a guiding concept

A literature review shows your readers that you have an in-depth grasp of your subject and that you understand where your own research fits into and adds to an existing body of agreed knowledge.

2.2 Review of related literature:

Adiv Gal. (2019) The era of M-learning, specifically the use of mobile phones, has been hardly noticeable in elementary schools. GIS technology is also rarely implemented there. In this study, 5th grade students' perceptions of the use of GIS technology through mobile phones were examined as part of an environmental education program designed to help preserve endangered species. The results show that the students provided special, valuable, critical and mature perspectives on the advantages and disadvantages of using mobile phones as part of the innovative pedagogy they apply in school. The use of the mobile phone and the new application as part of M-Learning made it easier for most students to create authentic learning, that is, learning focused on problems in the real world, and included a project of relevance and interest to the learners. The process of learning through mobile phones and GIS technology, which combined the creative use of teaching methods unfamiliar to students, focused on and was adapted to the learners' abilities, offering a diagnosis and constructive guidance based on success and community. In conclusion, 5th grade students testified that their elementary school could enter the M-Learning era by integrating mobile phones and adopting a student-centered learning approach.

Damopolii., & Kurniadi. (2019). Mobile learning is a learning media for using in helping teachers in the 21st century class to train students' metacognitive skills. There have not been many researchers on the use of mobile learning in senior high schools of Manokwari. Metacognitive skills become the focus of research that was to be achieved in this research. A total of 126 XI_{MIA} class students of SMA Negeri 01 Manokwari which was divided into five groups were taught used mobile learning in teaching biology. Data collected used learning outcomes test. Corebima rubric (2009) was used to measure metacognitive students. Data analysis showed that p = 0.214> 0.05, which means that there were no differences in metacognitive skills of students for the five treatment groups. The mean totaloverall of metacognitive skills was 70.12. It belongs to the good category. It can be concluded that the use of mobile learning in teaching can be training the metacognitive of students well in teaching biology.

David B. L. (2019). This study questions the commonly assumed variables used for studying students' rapidly changing relationships with smartphones, particularly in West Asia. To update how we think about and study cellphone use, a narrative analysis was conducted upon students' reported cellphone experiences. Students report managing contradictions between issues of necessity, distraction, lack of control, and insufficient cultural coping, which together capture a historical moment in the tensions of culture, technology, and pedagogy that drive the dialectics of socio-cultural necessities and institutional policies. The conclusion suggests ways these findings can update the categories used to study cellphone use in classrooms.

Moyazzem Hossain, (2019) As cell phone technology continues its rapid development, the device appears capable of contributing to student learning and improved academic performance. The recent rapid increase in cell phones has influenced multiple aspects of our daily lives, particularly those of Students. Therefore, the aim of the current study is to determine the influence of the mobile phone usage on academic performance among male and female students of Jahangirnagar University, Bangladesh. A face to face survey was conducted among 274 students which include 159 male students and 115 female students ranging from second year to fourth year from different departments of Jahangirnagar University, Bangladesh. Results depict that gender, age and relationship with opposite sex have a significant positive effect on students' academic performance. However, marital status, spending time on a mobile phone, negative effect of mobile phone and application usage while studying has a negative effect on students' academic performance. Cell phones are undeniably convenient, helpful tools for study and can be a hurtful source of distraction depending on the attitude and use pattern of a student. The author, however, suggests that mobile phone designers must take into account how young people use cell phones for educational purposes.

Marilyn, D. L., & Jerald, C. M. (2018). Cellular phone is very common nowadays. Its utilization varies from every walk of life. Among senior high school students, most of the students own the item and it replaces their subtle moments as observed in the locale intently studied Eventually, this study aimed to assess the association of using cellphone among the senior high school students and their level of academic performance of the 241 respondent invited to answer the survey which includes the level of academic performance of the student and the extent of cellphone utilization among the senior high school students. Both are treated together statistically to determine the association. The result of the study shall give the teachers and parents the idea of becoming permissive or not of their students’ use of cellular phones. Recommendations shall be identified in order to maximize the benefits of the use of cellular phones in and outside the classroom as well as making the item as a tool that aids teaching and learning activities of the students.

Mann C.D.A., (2018) Scholarly literature on education technology uptake has been dominated by technological determinist readings of students’ technology use. However, in recent years there has been a move by sociologists of education to highlight how the contexts in which educational technologies are introduced are not tabula rasa but socially and culturally complex. This study approaches technology as a social construct, arguing that students construct discursive meaning of, rather than simply respond to, technologies for learning. The study explores students' constructions of a mobile learning app that was introduced into lectures during a year-long university course. Students largely rejected the app, constructing it as unfitting for the context, a socially uncomfortable experience and an unacademic way of learning. The paper highlights the limitations of technological determinism and closes by arguing for readings of educational technologies that pay close attention to students' voices.

Ronald Kyobe., &Van Belle,J.P.(2018). The enhancement in smart phone functionality has created exceptional opportunities for learning and teaching enabling smart phones to play a vital supportive role in enriching students' learning experience. This study investigates the impact of smart phones on students learning experience in South Africa based on findings from one South African university's first year students. We found that students are mainly using smart phones to support them learning, but it is important to note that the use of smart phones hasn't yielded the same level of satisfaction for all students. Further analysis indicates that smart phones generally enhance student's learning experience but there is need to consider the hinderances and issues that stand in the way of students getting optimal returns from these devices.

Sumathi, K., Selva Lakshmi, N., &Kundhavai, S. (2018). Adoption of Smartphone by students of higher learning has been a global phenomenon in recent years. It is more than an integral part of adolescents' daily lives and has become the most popular form of electronic communication. In fact, the Smartphone has turned from a technological tool toa social tool. Smartphone and tablets play a very significant role in higher learning student's information seeking behavior in meeting their learning and research needs. This paper explores the impact of

Smartphone on academic performance of higher learning students. The study revealed high level of awareness about the usage of smartphones by higher learning students for their academic works. Results showcases that smartphones have tremendous impact on their higher education. Especially with easy internet access and high-speed browsing as it saves time and money rather than going to cybercafé/college library. Moreover, lack of experts who are technically strong on repairs during fault occurrence, operational difficulties, high cost of data subscription from service providers and fragility are the major problems that are encountered while using smartphones. This study aims in finding out the relationship between smartphone usage and academic performance among students of higher learning. The study involved data collation based on description of the phone usage habit such as browsing frequency, information sourced, sites visited, and examining the effect of smartphones on students' academic related activities. The hours spent on the phones by students were also gauged and compared with one another focusing on studies and learning perspectives respectively.

Zvavahera Promise., &Farai, C. (2018). This study was conducted over three months from March to May 2018, at a time when modern mobile phones possess various functions that are invaluable for learning, teaching and communication purposes. Whilst some countries with a quest to improve quality of education, have embraced the continuously evolving technological capacities of mobile phones for educational purposes, secondary school pupils in Zimbabwe are prohibited from using mobile phones in class as these are viewed to be disruptive rather than useful. This study investigated stakeholders' perceptions of potential utilization of cell phones by secondary school students as learning tools that enhance quality of education. The sample included 15 secondary schools in Mazowe District. From these, the District Education Officials, headmasters, teachers, pupils and parents were given questionnaires to complete. Validation interviews were conducted for triangulation purposes. The findings revealed strong positive responses in favor of allowing the utilization of mobile phones as learning tools in Zimbabwean secondary schools although some challenges in the implementation process were cited. These included possibilities of: student distraction in class; cheating; inappropriate video recording of class events and the publication of captured material on social platforms which could be harmful to other learners and the school. The issue of cost of data also came up. The study recommended the removal of the blanket ban on the use of mobile phones; instead, school authorities were encouraged to focus on developing strategies for addressing the implementation challenges cited. It is also critical to make sure that accessible cheap data be made available to learners in secondary schools. Schools in Zimbabwe should form networks so that cheap data is made available by sharing the networks. Schools in Zimbabwe, like institutions of higher learning, are encouraged to embrace the National Research and Education Network (NREN) concept which specializes in internet service provision dedicated to supporting the needs of education in Zimbabwe.

Fawareh, H.M., &ShaidahJusoh. (2017). The purpose of this study is to investigate the use and effects of smartphones on academic staffs at a university level, especially in the Kingdom of Saudi Arabia. We conducted a survey study using questionnaires. The questionnaires were randomly distributed to 66 academic staffs who own a smartphone at the Northern Border University. This study discovers the smartphone had replaced a computer, and an email application was mostly used. The academic staffs also had utilized smartphone as a means for knowledge sharing. Social media applications were greatly used in teaching and learning. Despite the benefits of smartphone use, academic staffs had been negatively affected. This study also reveals that having a smartphone diverted academic staffs' focus at work, created "check habits", and an artificial relationship; more than 90% of the respondents admitted that they put their smartphone besides their bed before sleep, and 61.41% of them claimed that they had the feelings of incompleteness whenever smartphones were not with them.

JairusE.U., Upelle, U.C., John Ogwuche,A., Thomas,O.I., Tyavlum,T., Ode,E.J., Ekpo Steve., & Isaac Agama,A. (2017). This study employed survey design in investigating the influence of mobile phone usage on academic performance among public secondary school students in Oju local government area, Benue State, Nigeria. The sample size consists of 100 respondents comprising of 25 teachers and 75students randomly selected from five selected secondary schools in Oju Local Government Area of Benue State. Questionnaires were used to obtain information from the respondents. Simple percentage was used to analyze the research questions while chi-square was used to test the hypotheses. The study revealed that the use of mobile phone among secondary school students had the significant relationship with their academic performance in Oju local government area. The research recommends among others that teachers should encourage students to take a more active role in the learning process and take an interest in using mobile phone technologies to improve educational experiences.

Juliet M. W., & McNamara, C.L, (2017). In this literature review, we explore cell phone use and its impact on academic performance of students in college classrooms. We discuss the prevalence of and motivation for cell phone use and how it affects user and peer academic performance as measured by grades earned in class and overall grade point average. Moreover, we include in our discussion the impact of classroom technology use on student-teacher interactions. Potential solutions to guide students and faculty toward more appropriate use of technology in the classroom and development of classroom syllabus policy are provided.

Additional implications of research findings as well as suggestions for future research in this field are included in our literature review.

Rahatalikhan., Jawadhussainawan., Shahzadahmedmemon., & Himazafar., (2017)

Developments in technology have led to the creations that have made our lives easier. Mobile phone or cell phone was developed to overcome landline or fixed connections in the way that it may be able to move and a person can carry out. Now mobile phone is not only a device for just a call or messaging rather it has become a smart device providing numerous features in a single component. Depending on its growth the researchers have developed applications based on all aspects of life like emails can be sent and received; internet can be accessed and many other functions have been included. Pakistan is one of the potential markets for the mobile operators as an enormous growth has been seen in mobile use during last decade. Pakistan being a huge market for mobile phones and network usage, this paper aims towards the study of ICT trends with mobile operators working and statistics in Pakistan from 2002 to 2017. This paper is about the telecom operators of Pakistan and their subscribers and also 3G and 4G statistics. The reasons of growth in number of subscribers are presented. Pakistan's mobile telecom operators are providing various value-added services and affordable tariffs which motivate people to opt for that particular operator. The services such as packages, tariffs, and tele-density of mobile phones are studied and other services like branchless banking and microfinance involvement are also given in detail for all the telecom operators which contribute towards economic growth of the country.

Subramani, P., &Aaseer, T. S. (2017). Objective: This study aimed to study the mobile phone addiction behavior and awareness on electromagnetic radiation (EMR) among a sample of Malaysian population. Methods: This online study was conducted between December 2015 and 2016. The study instrument comprised eight segments, namely, informed consent form, demographic details, habituation, mobile phone fact and EMR details, mobile phone awareness education, psychomotor (anxious behavior) analysis, and health issues. Frequency of the data was calculated and summarized in the results. Results: Totally, 409 respondents participated in the study. The mean age of the study participants was 22.88 (standard error = 0.24) years. Most of the study participants developed dependency with smartphone usage and had awareness (level 6) on EMR. No significant changes were found on mobile phone addiction behavior between the participants having accommodation on home and hostel. Conclusion: The study participants were aware about mobile phone/radiation hazards and many of them were extremely dependent on smartphones. One-fourth of the study population were found having feeling of wrist and hand pain because of smartphone use which may lead to further physiological and physiological complication.

Shiblu Miah., Moyazzem Hossain., & Habibur Rahman. (2017). Now-a-days mobile phone is very important communicational device. This cableless device reduces the hazards of the land phone. In spite of its various advantages it has some disadvantages also. Misusing of mobile phone increases the disadvantages of this device day by day. Unnecessary talking makes the reasons of wasting the money and time for the youth. Modern cell phones enable users to access a variety of electronic media at almost any time and any place. At present, the cell phone is likely to be on hand while university students are in class and studying. Thus, the main purpose of the present study is to investigate the usages pattern of cell phone in class room with the help of the evidences from Mathematical and Physical Science Faculty Students of Jahangirnagar University. The result shows that a cell phone is a very important tool for study as most of the respondents used their phones for study purposes. Cell phones are increasingly one of the most popular information access devices and multiuser functions which can be beneficial during study. This study suggests that mobile phone designers must take into account how young people use cell phones for educational purposes. The presence of cell phones presents a host of options and challenges for today's students. Higher institutions can take advantage of the potential and capitalize on the cell phone for educational purposes because of the intrinsic motivation of university students in wanting to communicate among themselves. Keywords: Mobile phone usage, Classroom, University students.

HarunaRabiu., Aisha I. M., Umaru,Y., & Hadiza, T.A.(2016) This study employed survey design in investigating the influence of mobile phone usage on academic performance among secondary school student in Jalingo, Taraba State, Nigeria. The sample for the study was 300 respondents selected from the total population of 6,482 respondents. Stratified sampling technique was employed to select the sample. The Mobile Phone Usage Questionnaire (MPUQ) adapted from Twum (2011), Mathematic Achievement Test (MAT) and English Language Achievement test (ELAT), were the instrument used for this study. Data collected were analyzed using mean, standard deviation, t-test and ANOVA to answer the research questions and hypotheses. The finding of this study, revealed that mobile phone usage significantly influence academic performance among male and female senior secondary school students ($t = 6.113$, $P = 0.02$), age difference was not a significant factor in mobile phone usage on academic performance among senior secondary school students ($f = 6.431$, $P = 0.022$), parent's occupation was not a significant factor in mobile phone usage on academic performance among senior secondary school students ($f = 9.005$, $p = 0.031$) and that the frequency of mobile phone usage does not significantly influence academic performance among male and female senior secondary school students ($t = 8.131$, $p = 0.02$). It was recommended that, School psychologists, teachers, school administrators, parents and students should be sensitized on the influence of mobile phone usage on academic performance among secondary school students irrespective of gender and age differences.

Mohammed Elfeky,A.I., & YakoubMasadeh, T.S.(2016). The present study aimed to examine the effect of Mobile Learning, which is a kind of E- learning that uses mobile devices, on the development of the academic achievement and conversational skills of English language specialty students at Najran University. The study used the quasi-experimental approach. Participants consisted of (50) students who were registered in a course called "Strategies of Teaching and Learning" offered by the Department of Curriculum and Instruction at the College of Education to students majoring in English at the Department of English Language at the College of Science and Arts. As usual participant students were divided into experimental and control groups of (25) students in each. The soft copy of the course content was uploaded to the University Blackboard System for students in the experimental group. Another hardcopy of the course content was delivered to students in the control group by hand in the first meeting. Data collection tools included an academic achievement test and conversational skills rating scale. Results showed that mobile learning had quite significant effect on both students' academic achievement and conversational skills. In light of these findings’ faculty members were recommended to adapt the use of Mobile Learning in their classes.

Naveenta Gupta., Sonia Garg., & Khushdeep Arora. (2016). Background: Mobile phones have become increasingly popular in recent years, especially in young generation. Although these are convenient and useful, teenagers are becoming more and more dependent on them.Aims and Objective: This study was designed to assess the mobile phone usage pattern and its negative effects on psychological health, sleep, and academic performance in students of a medical university. Materials and Methods: A descriptive study was conducted on a total of 1,000 medical students aged between 17 and 24 years who were using mobile phone for at least 1 year. They were requested to fill a specially designed, self-administrated, pretested, questionnaire that comprised details of their frequency and pattern of using mobile phone and its effects on their psychological health, sleep-related behavioral issues, and academic performance. The data collected were statistically analyzed. Result: Among the total 1,000 students, all of them possessed their own mobile phone, with about 76.4% students having smart phones. Major purpose of using the phone was for communication, coordination of activities, and in emergency situations, while others were also using it for downloading games, music, videos, and for style. Nighttime usage of mobile phone was highly significantly ($p < 0.0001$) associated with difficulty in waking up, waking time tiredness, decline in study habits, difficulty in concentration, increase in missed classes, and going late for classes. Total time spent on mobile phones was significantly ($p < 0.05$) associated with waking time tiredness and difficulty in waking up and highly significantly ($p < 0.001$) with decline in study habits, increase in missed classes, and going late for classes. Conclusion: Besides the positive role of mobile phones in our daily lives, its overuse presents negative impact on psychological health, sleep, and academic performance of students. Hence, it is important to guide the students regarding efficient, safe, purposeful usage, and negative effects of mobile phones on health and environment.

Sunil Gupta., &Navin Kumar. (2016). Media technology has become integral part of children’s lives in the twenty-first century. The world of electronic media is changing with a fast pace. After television it has joined by many other media resources like cell phones (mobile), iPods, video games, messaging, social networks sites and e-mail. Recently from an Indian study of Mahakud and Bhola (2014) found that more male participants usage social networking especially through mobile than to their female counterpart in a study. The results especially indicate that higher age group peoples, particularly female participants more than to the lower age group. Similarly, the comparison between age group of participants the present study indicates that higher age group usage more time mass media especially mobile, Internet and other media than to the younger age group. From the present study it can be concluded that, although the usage of mass media has positive effects on wellbeing of users still, the negative effects of mass media cannot be neglected. With knowing the ethical guidelines and decent usage of mass media can be more effective for the users especially for adolescent and youth.

Andrew Lepp., Jacob E. B., & Aryn C. K. (2015). The cell phone is ever-present on college campuses and is frequently used in settings where learning occurs. This study assessed the relationship between cell phone use and actual college grade point average (GPA) after controlling for known predictors. As such, 536 undergraduate students from 82 self-reported majors at a large, public university were sampled. A hierarchical regression ($R^2 = .449$) demonstrated that cell phone use was significantly ($p < .001$) and negatively ($\beta = -.164$) related to actual college GPA after controlling for demographic variables, self-efficacy for self-regulated learning, self-efficacy for academic achievement, and actual high school GPA, which were all significant predictors ($p < .05$). Thus, after controlling for other established predictors, increased cell phone use was associated with decreased academic performance. Although more research is needed to identify the underlying mechanisms, findings suggest a need to sensitize students and educators about the potential academic risks associated with high-frequency cell phone use.

Jangraiz Khan, Zilakat Khan Malik & Suleman Amin (2015) This Paper concentrates on the impact of mobile phones on university students with special reference to University of Peshawar. A sample of 100 students was drawn from different departments of University of Peshawar for this purpose. The study used descriptive and quantitative tools for analysis. The results showed that almost 60% of the students got mobile phones from their parents. 42% of the students keep mobile phones for contacts with friends and society. Out of the sampled students, 6% use mobile phone for information access. Majority of the students (87%) are using mobile phone for the period of more than one year. They feel proud of having costly mobile phones and sometimes, use it as a source of unfair means during examination. They use its dictionary and other informative functions. The parents of female students feel easy with mobile phone to contact their daughters. They think that this new technology has not only improved the academic performance of the students but also improved the quality of education. It is recommended that the university students should try use of mobile phones positively and not waste their time unproductive text messages.

NaciyeGulizUgura, & TugbaKoca., (2015) With the expansion of the technology, people –especially the students- have a vast array of e-communication tools at their fingertips and feel as appertained to them. Current researches have estimated that 100% of university students have their own mobile phones and all of them bring their devices to the courses. Minority of the students use their smartphones to enhance learning, such as to look up pertaining information about the lesson, take pictures of information on the blackboard; however, majority of them use smartphones for personal affairs during courses. Keeping in touch during lesson hinders students' learning experience and, it also occurs during examinations, although it is illegal. The purpose of this study is to explore some of the challenges associated with mobile phones in college classrooms. A sample of students from different departments was surveyed to assess the extent to which the technology is considered a serious source of distraction in the classroom and also during the exams. We examined and enlightened several social aspects of this multi-faceted larger societal theoretical concept of technological connectivity; namely phubbing, cheating during courses and students' opinions towards cell phone regulations and instructor behaviors. According to the results, the pattern of percentages within genders reveals the intention of students. Male students seem calmer, whereas female participants appear more sensitive about disturbing their classmates. The size of the classroom also has a big impact. As the class becomes larger, students behave more uninhibited and phub without being noticed. Majority of the students are distracted by their classmates and also confess that they can cheat with the help of their phones.

SoyemiJumoke, Oloruntoba S. A., & Okafor Blessing (2015) The usage of Internet enabled mobile phones is a 21st century experience which covers various operations. This research work examines phone usage and identified the effects internet enabled mobile phones have on the academic performance of students at the tertiary institutions using the Federal Polytechnic students of Ilaro, Ogun State in Nigeria as a case study. The research work was performed so as to understand and also find the correlation between academic performance of students and the usage of mobile phone during class hours which is general believed to be an avenue of distractions to students. The information from this work was carried out using structured questionnaires administered to 45 students to get their individual views. In addition, 15 extensive interviews were done concurrently to have a grounded knowledge of the students with the data gathered during the course of this study. Our findings indicated that students are influenced negatively to a great extent by the mobile phone because attention is focused on chatting, music and others while their academic activities are neglected and left to suffer. Also, this study discovered that the use of mobile phone is uncontrollable among students which are the leading cause of poor academic performance among students.

Tripura Sundari., (2015) Mobile phones have become the most popular way to communicate with other individuals. While cellphones have become less of a status symbol and more of a fashion statement, they have created an unspoken social dependency. Adolescents and young adults are more likely to engage in SMS messing, making phone calls, accessing the internet from their phone or playing a mobile driven game. Once pervaded by boredom, teenagers' resort to instant connection, to someone, somewhere. Sensation seeking behavior has also linked adolescents and young adults to have the desire to take risks with relationships, rules and roles. Individuals seek out entertainment and avoid boredom at all times be it appropriate or inappropriate. Cell phones are used for entertainment, information and social connectivity. It has been demonstrated that individuals with low self – esteem use cell phones to form and maintain social relationships. They form an attachment with cell phone which molded their mind that they cannot function without their cell phone on a day-to-day basis. In this context, the study attempts to examine the extent of use of mobile phone and its influence on the academic performance of the students. A face to face survey using structured questionnaire was the method used to elicit the opinions of students between the age group of 18-25 years in three cities covering all the three regions the State of Andhra Pradesh in India. The survey was administered among 1200 young adults through two stage random sampling to select the colleges and respondents from the selected colleges, with 400from each city. In Hyderabad, 201 males and 199 females participated in the survey. In Visakhapatnam,192 males and 208 females participated. In Tirupati, 220 males and 180 females completed the survey. Two criteria were taken into consideration while choosing the participants for the survey. The participants are college-going and were mobile phone users. Each of the survey responses was entered and analyzed using SPSS software. The Statistical Package for Social Sciences (SPSS - 16) had been used to work out the distribution of samples in terms of percentages for each specified parameter.

Mohamed Ally., & Josep Prieto-Blázquez (2014) The evolution of wireless technologies and the development of applications for mobile devices in higher education have been spectacular. For many educators, mobile technology in the field of teaching and learning has recently become one of the most important areas of research. Today, mobile learning is a strategic topic for many organizations concerned with education. In the future, more research should be conducted to transform education using mobile learning. The advent of new types of devices is disruptive to education, no matter what educators and education institutions do. Therefore, a thorough analysis, from a pedagogical and technological perspective, is key to ensuring appropriate usage and implementation of mobile learning. This Special Section of RUSC. Universities and Knowledge Society Journal presents a general overview of successful mobile learning experiences in higher education. Its aim is to share best practices and create new opportunities in universities. These mobile applications will add another layer to the learning and teaching processes.

FlorenceMartin,J.E. (2013). Mobile technology opens the door for a new kind of learning called *here and now learning* that occurs when learners have access to information anytime and anywhere to perform authentic activities in the context of their learning. The purpose of this study was to investigate the effects of here and now mobile learning on student achievement and attitude. The research questions addressed were (1) Does "Here and Now" mobile learning significantly improve student achievement when compared with Computer based Instruction? (2) Does "Here and Now" mobile learning significantly improve student attitude when compared with Computer based Instruction? (3) Are there differences in student achievement and attitudes when "Here and Now" mobile learning is delivered using a tablet versus ipod? 109 undergraduate students enrolled in preservice instructional design and instructional technology courses at a regional southeastern university participated in the study. Participants took a pretest at the beginning of the study, and then were assigned to one of the versions of an art lesson (CBI version and iPad/iPod version) which were developed using Lector Inspire incorporating information on five different paintings in the education building. After the lesson, they completed the posttest and an attitude survey. ANOVA was conducted on data obtained from the achievement posttest and on the attitude, survey results for the Likert type items (Items 1–12). Analyses on achievement and attitude data revealed positive significant differences. The CBI treatment achieved positive posttest scores on the posttest while the iPad/iPod treatments had positive attitudes. This study has implications for those designing and implementing mobile learning.

Jeffrey H.K. (2013) This research was designed to explore the learning experiences of state college students using mobile electronic textbook (e-book) readers. The purpose of the study was to build a rich description of how students used e-books delivered on mobile computing devices for college-level, introductory sociology courses at a public state college in the southeastern United States. This research employed a multiple case study design that investigated and documented student experiences with this instructional technology. The bounding frame was comprised of the literature on mobile technology, mobile learning theories, and e-books. A theoretical lens of learning theories commonly found in the literature on mobile learning (constructivism, social cognitive theory, self-efficacy theory, expectancy x value theory, self-determination theory, and situated cognition) was situated within the mobile learning framework. The theoretical lens was used to provide insight to the student's learning experiences. Six conclusions were drawn from the study: (1) students expressed competence in their use of the mobile e-books, (2) students expressed feelings of high self-efficacy when using the mobile e-books, (3) students valued the use of the mobile e-books for their learning, (4) students were individualized and metacognitive in their learning with the mobile e-books, (5) students enhanced their learning socially and within situated learning opportunities, and (6) the students and the instructor had divergent views on the value and utility of social, interactive textbooks.

Kuznekoff, J. H., &Titsworth, S. (2013) In this study, we examined the impact of mobile phone usage, during class lecture, on student learning. Participants in three different study groups (control, low-distraction, and high-distraction) watched a video lecture, took notes on that lecture, and took two learning assessments after watching the lecture. Students who were not using their mobile phones wrote down 62% more information in their notes, took more detailed notes, were able to recall more detailed information from the lecture, and scored a full letter grade and a half higher on a multiple choice test than those students who were actively using their mobile phones. Theoretical and pedagogical implications are discussed. (PsycINFO Database Record (c) 2019 APA, all rights reserved)

SadafNawaz1., &Zahoor Ahmad. (2012) The adoption of the mobile phone by young people has been a global phenomenon in recent years. Itis now an integral part of youngsters' daily lives and is for the majority, the most popular form of electronic communication. In fact, the mobile phone has turned from a technological tool to a social tool. This paper explores the impact of the mobile phone on youth peer relationships, on family relationships and on the institution. Young people use the mobile phone in positive ways to organize and maintain their social networks. However, there are also negative impacts on young peoples' peer relationships. These can include ostracism and cyber bullying. Demographic tools are used to gain insights into how students' value various mobile phone applications and tools. For this purpose, a survey has been conducted. We visited five well known colleges of Gujrat city, Fatima Jinnah College, Marg Hazar College for Women, Government Commerce College for Boys, Gujrat College of

Commerce for Girls and Gujrat College of Commerce for Boys and important data has been collected. The data have been analyzed and the results have been discussed.

FezileOzdamlia., & NadireCavusb. (2011) Mobile learning (m-learning) as a kind of learning model allowing learners to obtain learning materials anywhere and anytime using mobile technologies and the Internet. It is necessary that the elements of mobile learning are organized correctly and the interactions between the various elements are combined in an efficient and optimum way so that the mobile learning is successful and the implementation is efficient. In addition, the characteristics of mobile learning should be organized, and the way they are applied to mobile learning activities and the application methods and the duration of the application time should be planned well in advance. Consequently, a deeper insight into theory-based research is required to better understand the underlying motivations that lead academics to adopting mobile learning elements and characteristics. These reasons have motivated authors to carry out this study. Learner, teacher, environment, content and assessment are basic elements of the complete mobile learning. The core characteristics of mobile learning are ubiquitous, portable size of mobile tools, blended, private, interactive, collaborative, and instant information. They enable learners to be in the right place at the right time, that is, to be where they are able to experience the authentic joy of learning. The aim of this study is to describe the basic elements and characteristic of mobile learning according to new trends in developing technology. The paper might be useful for anyone interested in designing, preparing and implementing a mobile learning.

Angelo Juan Ramos., Ranga JeromeTriñona,A.I., &David Lambert (2007). The cell phone, now the most widely used medium in Asia, has major educational implications. Most users, however, do not realize the cell phone's potential for education, nor even for the communication functions for which it was originally designed. Most educators still see the computer and the cell phone as unrelated devices, and the tiny cell phone more as a personal accessory, especially for young people. With falling prices and increasing functionality, however, it is virtually certain that not too far in the future all of the world's students will have a cell phone. This is sufficient reason and motivation for educators to explore the possibility of making the cell phone an important tool in the educational systems of developed and developing countries. This article describes the experience of two major projects that are studying the potential of cell phone and short message service (SMS) techniques for formal and nonformal education in the Philippines and Mongolia. The studies have yielded positive reactions from students and trainees about the potential of these techniques, and are suggesting design and logistical principles for use in educational cell phone implementation.

2.3 CONCLUSION

The review of research studies relates the impact of mobile phone or mobile phone usage on higher secondary school students, teachers, school administrators, school psychologist, adolescent, adult, parent, and children from India and Abroad. Though the research studies reveal both pros and cons of usage of mobile phone among college students, higher secondary school students, high school student, and elementary school students. Till there exists a wide gap in its academic performance on the students of present generation.

Chapter III

Methodology

CHAPTER-III

METHODOLOGY

3.1 INTRODUCTION

Methodology is an important aspect in any kind of research work. The role of methodology is to carry on research work in a scientific and valid manner. Methodology is process, which reveals all those methods and techniques used by the researcher during studying her research problem. Adaptations of a suitable methodology raise the efficiency and dignity of the research work. The success of any research mainly depends on the tools, techniques and proper methods adopted in the research process.

3.2 DESIGN OF THE STUDY

A research design is highly essential, and it is inevitable as a blueprint. In the present investigation Descriptive research design and survey analysis is followed**.**

3.3 LOCATION OF THE STUDY

The present investigation was conducted in the higher secondary schools' students of 118 females and 62 males are situated in **cuddalore District.**

3.4 RESEARCH METHOD

Normative survey is used in the present study. It seeks to obtain precise information concerning the current status phenomena and to draw valid general conclusions from the facts discovered. This study is not restricted only to fact findings but in formulation of important principal knowledge and solution of significant problem related to the mobile phone usage of higher secondary schools' students and other significant variables related to it.

3.5 SAMPLE OF THE STUDY

Students from government schools, private schools, and aided school were chosen for sample collection. The respondents were randomly selected from each school.

3.6 DISTRIBUTION OF THE SAMPLE

The random sampling method was used to select the samples. The sample was divided into different categories on the basis of Father's occupation, Mother's occupation, Locality, Father's Annual income, Mother's Annual income, Gender, Father's qualification, Mother's qualification, family type, school type,10th marks, group belongs , own mobile phone, time spend for chatting, time spend for education, Facebook followers and knowing learning apps.

Table-3.1 LIST OF SCHOOLS INVOLVED IN THE STUDY

S.NO	**SCHOOL NAME**	**Place**	**Number of respondents**
Government Schools			
1	Government Girls Higher Secondary School	Puthunagar	24
2	Government Higher Secondary School	Karunkuzhi	36
Private Schools			
3	Arunachala Matriculation Higher Secondary School	Kurinjipady	20
4	S.D.Eden Matriculation Higher Secondary School	Vadalur	23
5	St.paul Matriculation Higher Secondary School	Kurinjipady	26
Aided Schools			
6	Chandra Higher Secondary School	Sethiyathope	31
7	S.K. Velayatham Higher Secondary School	Kurinjipady	20
		Total	180

3.7 POPULATION SIZE

In cuddalore District, there are 29,900 Higher Secondary School students are enrolled. The samples were selected randomly from Higher Secondary School. So, 0.93 % was tested for the problem of the study.

3.8 VARIABLES SELECTED FOR THE STUDY

For the present investigation the investigator selected the following variables.

1. **Research Variables**

   Mobile phone usage

2. **Demographic Variables**
   1. Father's occupation
   2. Mother's occupation
   3. Locality
   4. Father's Annual income
   5. Mother's Annual income
   6. Gender
   7. Father's qualification
   8. Mother's qualification
   9. Family type
   10. School type
   11. 10th Marks
   12. Groups belongs
   13. Own Mobile Phone
   14. Time spends for chatting

15. Time spends for Education

16. Facebook followers

17. Knowing learning apps

Table 3.2

THE DETAILED DISTRIBUTION OF THE SAMPLES

S.No	Personal Variables		N	Percentage
1	Father's Occupation	Farmer	92	51.11
		Coolie	24	13.33
		Business	21	11.66
		Private	28	15.55
		Government	8	4.44
		Died	7	3.88
2	Mother's Occupation	Housewife	140	77.77
		Working/Business	40	22.22
3	Locality	Rural	116	64.44
		Urban	42	23.33
		Semi - Urban	22	12.22
4	Father's Annual Income	0-50,000	42	23.33
		51,000-1 Lakhs	112	62.22
		1 Lakhs – 1.5 L	18	10
		1.5 L – 2 L	6	3.33
		2 L – 2.5 L	2	1.11
5	Mother's Annual Income	No Income	159	88.33
		Income	21	11.66
6	Gender	Female	118	65.55

		Male	62	34.44
7	Father's Qualification	Illiterate	18	10
		School Education	134	74.44
		Diploma	14	8.33
		College	13	7.22
8	Mother's Qualification	Illiterate	19	10.55
		School Education	142	78.88
		Diploma	5	2.77
		College	14	7.77
9	Family Type	Nuclear	138	76.66
		Joint	34	18.88
		Single Parent	8	4.44
10	Type of School	Government	60	33.33
		Private	69	38.33
		Aided	51	28.33
11.	10th Marks	40-49	19	10.55
		50-59	23	12.77
		60-69	43	23.88
		70-79	43	23.88
		80-89	44	24.44
		90 -99	8	4.44
12.	Group	Maths and Computer Science	20	11.11
		Maths and Biological Science	75	41.66
		Commerce and Computer Science	38	21.11
		Commerce and History	5	2.77
		Pure Science	42	23.33

Sl.no	Mobile Factors		N	Percentage
13.	Own Mobile phone	Yes	30	16.66
		No	150	83.33
14	Time spending on mobile for chatting	0 hour	45	25
		1-2	114	63.33
		3-4	21	11.66
15	Time spending on mobile for Education	0 hour	59	32.77
		1-2	102	56.66
		3-4	19	10.55
16	Facebook followers	No followers (0)	134	74.44
		1-50	20	11.11
		51-100	11	6.11
		101-150	15	8.33
17	Known Learning App	No App (0)	48	26.66
		1-5	107	59.44
		6-10	21	11.66
		11-15	4	2.22

3.9 TOOL USED

Mobile phone usage questionnaire constructed and validated by the Researcher Dr.D.Ponmozhi and L.Ramalakshmi (2020) has been used in this study.

3.10 DESCRIPTION OF THE TOOL USED

Mobile phone usage questionnaire constructed and validated by the Researcher Dr.D.Ponmozhi and L.Ramalakshmi (2020). This scale consists of **33 statements** covering the **4 dimensions** of mobile phone usage. Each statement has the range of **five responses**. They are Strongly Agree, Agree, not sure, Disagree and Strongly Disagree. The respondents are requested to put a tick in the relevant column against each statement.

3.11 PILOT STUDY

This scale with 36 items has been administered to the sample of 100 higher secondary school students studying in different schools in Cuddalore district, in order to carry out the pilot study. Then their responses have been scored carefully and they were subjected to item analysis. A copy of mobile phone usage questionnaire scale is given in Appendix 1.

3.12 SCORING

In the mobile phone usage questionnaire scale used, each statement is followed by five alternatives viz., ‘Strongly Agree (SA)’, ‘Agree (A)’, ‘Not Sure (NS)’, ‘Disagree (D)’, ‘Strongly Disagree (SD)’. In case of favorable statements, the scores given to different responses are as follows; Positive Statement SA-5, A-4, NS-3, D-2, SD-1. Negative Statement SA-1, A-2, NS-3, D-4, SD-5.

3.13 DIMENSIONS OF MOBILE PHONE USAGE

Educational usage: Individuals can learn whatever, wherever, and whenever they want.

Personal usage: Individuals can locate places, identify, store the data and buy many things.

Communicational usage: Individuals can easily talk or video chat with anyone across the globe by just moving the fingers.

Hobbies usage: Individual gets entertained through games, movies, songs, serials etc.,

Table-3.3

DIMENSIONS OF MOBILE PHONE USAGE AND THEIR ITEMS USED IN PILOT STUDY

S.NO	DIMENSIONS	NO OF ITEMS
1.	Personal	06
2.	Educational	16
3.	Communicational	07
4.	Hobbies	07
Total		**36**

3.14 ITEMS ANALYSIS AND SELECTION OF ITEMS

The scale has the ‘Universe of content as it includes statements from all the selected dimensions of Personal, Educational, Communicational, Hobbies. Due weightage was given to all the dimensions while selecting items. The scale contains 36 statements which represent the universe of content. Hence, it has content validity. It has also construct validity as items were selected having the ‘t’ values equal to or more than 1.75. (Edwards, 1975). The scale was given to experts in the field of education and they agreed that the items in the scale were relevant to the objectives of the study. Hence it has face validity also. The present study employed Chronph Alpha method to determine the co-efficient of internal consistency. The reliability of the Chronph Alpha test is found to be 0.72.

Table - 3.4

ITEM ANALYSIS AND SELECTION ITEM FOR MOBILE PHONE USAGE OF HIGHER SECONDARY SCHOOL STUDENT QUESTIONNAIRE

Item No	t-Value	Result
1	3.46	S
2	2.12	S
3	4.39	S
4	5.79	S
5	4.05	S
6	4.01	S
7	7.36	S
8	4.03	S
9	4.51	S
10	1.78	NS
11	2.79	S
12	5.79	S
13	3.65	S
14	3.88	S
15	6.07	S
16	4.89	S

17	4.88	S
18	5.77	S
19	3.90	S
20	3.55	S
21	3.97	S
22	3.05	S
23	4.73	S
24	7.99	S
25	3.74	S
26	5.56	S
27	3.42	S
28	3.46	S
29	3.71	S
30	2.27	S
31	-1.83	NS
32	3.93	S
33	-0.82	NS
34	5.15	S
35	3.44	S
36	5.08	S

3.15 FINAL STUDY

This scale with 33 statements has been administered to the sample of 180 higher secondary school students studying in different schools, in order to carry out the final study. Then their responses have been scored carefully and they were subjected to item analysis. A copy of Mobile phone usage questionnaire final is given in Appendix 2

Table-3.5

DIMENSIONS OF MOBILE PHONE USAGE AND THEIR ITEMS USED IN FINAL STUDY

S.NO	DIMENSIONS	NO OF ITEMS
1.	Personal	05
2.	Educational	14
3.	Communicational	07
4.	Hobbies	07
Total		**33**

3.16 VALIDITY AND RELIABILTY OF THE TOOL

The reliability scale was found with help of chronph alpha and the reliability scale was 0.72 and validity of the scale is 0.84.

3.17 STATISTICAL TECHNIQUES USED

The following Random sample techniques were used for analysis and interpretation of data.

Descriptive analysis:

1. Measure of central tendency [Mean]
2. Measure of variability [Standard Deviation]

Inferential Analysis:

1. "t" test
2. "f" test

Multiple Correlation and

Regression Analysis

3.18 CONCLUSION

To find out the Mobile phone usage of higher secondary students, mobile phone usage questionnaire (constructed and validated by the Researcher Dr.D.Ponmozhi and L.Ramalakshmi 2020) were administered to a sample of 180 students. The score was subjected to statistical treatments, which are described in the succeeding chapter IV.

Chapter IV

Analysis and Interpretation

CHAPTER- IV

ANALYSIS INTERPRETATION

4.1 INTRODUCTION

The statistical analysis of the data has been presented in this chapter. The data collected from 180 students in higher secondary school have analysed as follows to arrive at meaningful conclusions.

- Descriptive Analysis [Mean and Standard Deviation],
- Inferential Analysis [t-test and f-test],
- Multiple Correlation Analysis
- Regression Analysis

4.2 LEVEL OF SIGNIFICANCE

The level of significance for rejection or acceptance of the hypothesis has to be decided in advance. In reporting the findings of the study, the researcher should indicate the actual probability level associated with the findings so that the researcher may use his own judgments in deciding whether the null hypothesis should be rejected or accepted in the present study 0.05 Level of significant has been taken into account.

4.3 DESCRIPTIVE ANALYSIS

One of the important objectives of the study is to assess the level of Mobile Phone usage of the Higher Secondary School Students. For that, the investigator used **Mobile Phone usage questionnaire constructed and validated by the Researcher Dr.D.Ponmozhi and L.Ramalakshmi (2020).** The test consists of 33 questions. The maximum score for this test is

165 For that higher secondary school students were divided into Very Low, Low, Moderate, High and Very High level of Mobile Phone usage category. In order to divide the sample into above stated categories investigator adopted the following method. The categorization was done by dividing the baseline normal cure into 5 units, each unit being Very Low (0-33), Low (34-66), Moderate (67-99), High (100-132), and Very High Level (133-165).

ANALYSIS OF THE LEVEL OF MOBILE PHONE USAGE OF HIGHER SECONDARY SCHOOL STUDENTS.

TABLE - 4.1 Percentage analysis of Mobile Phone usages of the total sample

S.No	**Mobile Phone usage**	**Score**	F	**Percentage**
1	very Low	0-33	0	0
2	Low	34-66	3	1.7
3	Moderate	67-99	38	21.1
4	High	100-132	123	68.3
5	Very High	133-165	16	8.9

The above table 4.1 shows that **68.3 % of higher Secondary School Student Mobile Phone usage are High**, 21.1 % of higher Secondary School Student Mobile Phone usage are Moderate, 8.9 % of higher Secondary School Student Mobile Phone usage are Very High and 1.7% of higher Secondary School Student Mobile Phone usage are Low.

ANALYSIS OF THE LEVEL OF MOBILE PHONE USAGE OF ENTIRE AND SUB SAMPLES

One of the important objectives of the study is to assess the level of Mobile Phone usage of the higher secondary school students not for the entire sample but also subsample wise. For that the mean standard deviation values have been calculated for entire and subsamples which include Father Occupation, Mother Occupation, Locality, Father Annual Income, Mothers Annual Income, Gender, Father's Qualification, Mother's Qualification, type of family, type of school, marks obtained in 10 std, groups, own mobile phone, time spend for chatting, time spend for Education, followers on Facebook and Learning apps

Table-4.2 Mean and Standard Deviation of Mobile Phone usage of entire sample

Variable	N	Mean	Standard deviation
Mobile Phone usage	**180**	**110.04**	**18.54**

The above table 4.2 shows the mean score and standard deviation of Mobile Phone usage of Higher Secondary school students. It is found to be 110.04 and 18.54 respectively and concluded that **the higher secondary school students mobile phone usage is high (100-132)**

Table – 4.3

DESCRIPTIVE ANALYSIS OF THE TOTAL MOBILE PHONE USAGE

S.No	Personal Variables		N	Percentage	Mean	SD
1	Father's Occupation	Farmer	92	51.11	111.56	18.62
		Coolie	24	13.33	110.29	18.12
		Business	21	11.66	106.38	17.39
		Private	28	15.55	111.03	20.65
		Government	8	4.44	103.37	16.48
		Died	7	3.88	103.85	17.48
2	Mother's Occupation	Housewife	140	77.77	110.11	18.68
		Working/Business	40	22.22	109.80	18.27
3	Locality	Rural	116	64.44	110.21	18.53
		Urban	42	23.33	109.14	18.14
		Semi - Urban	22	12.22	110.86	20.14
4	Father's Annual Income	0-50,000	42	23.33	111.14	19.80
		51,000-1 Lakhs	112	62.22	111.05	18.18
		1 Lakhs – 1.5 L	18	10	103.33	16.52
		1.5 L – 2 L	6	3.33	102.33	23.29
		2 L – 2.5 L	2	1.11	114.00	8.48
5	Mother's Annual Income	No Income	159	88.33	110.08	17.86
		Income	21	11.66	109.71	23.63
6	Gender	Female	118	65.55	106.83	18.39
		Male	62	34.44	116.16	17.38
7	Father's Qualification	Illiterate	18	10	108.88	21.21
		School Education	134	74.44	110.40	18.81
		Diploma	14	8.33	106.40	14.98
		College	13	7.22	112.15	16.83

8	Mother's Qualification	Illiterate	19	10.55	104.05	19.64
		School Education	142	78.88	112.04	17.72
		Diploma	5	2.77	93.00	22.80
		College	14	7.77	103.92	19.66
9	Family Type	Nuclear	138	76.66	108.81	18.31
		Joint	34	18.88	115.85	18.50
		Single Parent	8	4.44	106.62	20.22
10	Type of School	Government	60	33.33	110.03	22.10
		Private	69	38.33	108.46	17.17
		Aided	51	28.33	112.19	15.67
11.	10th Marks	40-49	19	10.55	113.36	22.36
		50-59	23	12.77	111.56	20.84
		60-69	43	23.88	111.32	19.63
		70-79	43	23.88	105.55	15.57
		80-89	44	24.44	112.15	15.59
		90 -99	8	4.44	103.37	25.14
12.	Group	Maths and CS	20	11.11	116.60	15.59
		Maths and Bio	75	41.66	109.98	16.95
		Com and CS	38	21.11	108.89	17.50
		Com and His	5	2.77	112.80	13.47
		Pure Science	42	23.33	107.73	23.39

S.No	Mobile Factors		N	Percentage	Mean	SD
13.	Own Mobile phone	Yes	30	16.66	113.60	13.45
		No	150	83.33	109.33	19.36
14	Time spending on mobile for chatting	0 hour	45	25	104.55	17.98
		1-2	114	63.33	111.79	18.78
		3-4	21	11.66	112.28	16.80
15	Time spending on mobile for Education	0 hour	59	32.77	106.42	19.60
		1-2	102	56.66	111.41	18.26
		3-4	19	10.55	113.94	15.52
16	Facebook followers	No followers	134	74.44	107.65	19.32
		1-50	20	11.11	115.05	17.56
		51-100	11	6.11	122.72	10.08
		101-150	15	8.33	115.40	10.54
17	Known Learning App	No App	48	26.66	107.47	22.26
		1-5	107	59.44	110.00	18.01
		6-10	21	11.66	114.42	11.53
		11-15	4	2.22	118.75	8.05

The above table **4.3** exhibits the whole details about Mobile phone usage among the higher secondary school students, its mean and standard deviation for the demographic variables such as Father's occupation, Mother's occupation, Locality, Father's annual income, Mother's annual income, Gender, Father's qualification, mother's qualification, type of family, School type, Marks Obtained in 10th, Groups Belong in 11th, Own mobile phone, Spending time for chatting, Spending the time for Education, Face book followers and, Known Learning App.

It is inferred from the above table that,51.11 percent of the respondents Fathers are farmer, 13.33percent of the respondents Fathers are Coolie,11.66 percent of the respondent's

Fathers are business, 15.55 percent of the respondents' Fathers are private, 4.44 percent of the respondents' Fathers are government, and 3.88 percent of the respondent's Father's occupation are died. The mean and standard deviation the farmer is 111.56 and 18.62 respectively. The mean and standard deviation the coolie is 110.29 and 18.12 respectively. The mean and standard deviation the business is 106.38 and 17.39 respectively. The mean and standard deviation the private are 111.03 and 20.65 respectively. The mean and standard deviation the government are 103.37and 16.48 respectively. The mean and standard deviation the no father is 103.85 and 17.48 respectively. **The students whose fathers are farmers and from private organisations use mobile frequently than others.**

It is inferred from the above table that, 77.77 percent of the respondents' Mother's occupation are Housewife, 22.22 percent of the respondent's Mother's occupation are Working. The mean and standard deviation the Housewife are 110.11 and 18.68 respectively. The mean and standard deviation the Working are 109.80 .and 18.27 respectively. **The students whose mothers are housewives shows high level of mobile phone usage than others.**

It is inferred from the above table that, 64.44 percent of the respondents are living in rural area,23.33 percent of the respondents are living in urban area and 12.22 percent of the respondents are living in Semi- urban area. The mean and standard deviation for the rural Students is 110.21 and 18.53 respectively. The mean and standard deviation for the urban Students is 109.14 and 18.14 respectively. The mean and standard deviation for the semi -urban Students are 110.86 and 20.14 respectively. **The rural and semi-urban Students Mobile phone usage is more than the others.**

It is inferred from the above table that; 23.33 percent of the respondents' fathers are earning Rs0-50,000. 62.22 percent of the respondents fathers are earning Rs51,000 – 1 Lakhs, 10 percent of the respondents' fathers are earning Rs1 Lakhs – 1.5 Lakhs, 3.33 percent of the respondents' fathers are earning Rs1.5 Lakhs – 2 Lakhs, 1.11 percent of the respondents' fathers are earning Rs2 Lakhs – 2.5 Lakhs percent of the respondents' fathers are earning no income. The mean and standard deviation for respondents with Rs0-50,000 fathers' income are 111.14 and 19.80 respectively. The mean and standard deviations for respondents with Rs51, 000 – 1 Lakhs fathers' income are 111.05 and 18.18 respectively. The mean and standard deviations for respondents with 1 Lakhs – 1.5 Lakhs fathers' income are 103.33 and 16.52 respectively. The mean and standard deviations for respondents with 1.5 Lakhs – 2 Lakhs fathers' income are 102.33 and 23.29 respectively. The mean and standard deviations for respondents with 2 Lakhs – 2.5 Lakhs fathers' income are 114.00 and 8.48 respectively. **The students whose father's annual income of Rs2.00 Lakhs to 2.5 Lakhs shows high level of Mobile phone usage than others.**

It is inferred from the above table that 88.33 percent of the respondents' mothers are no income and 11.66 percent of the respondent's mothers are income. The mean and standard deviation for respondents no income is 110.08 and 17.86 respectively. The mean and standard deviations for respondents with income are 109.71 and 23.63 respectively**. The mother's Nil income shows high level of mobile phone usage than others.**

It is inferred from the above table that 65.55 percent of the respondents are female and 34.44 percent of the respondents are male. The mean and standard deviation for the female Students is 106.83 and 18.39 respectively. The mean and standard deviation for the male Students is 116.16 and 17.38 respectively. **The male Students Mobile phone usage is more than the female students.**

It is inferred from the above table that 10 percent of the respondent's father qualified are illiterate, 74.44 percent of the respondent's father qualified are school education, 8.33percent of the respondent's father qualified are diploma and 7.22 percent of the respondent's father qualified are college. The mean and standard deviation for the illiterate father is 108.88 and 21.21 respectively. The mean and standard deviation for the school education father are110.40 and 18.81 respectively. The mean and standard deviation for the diploma father is 106.40 and 14.98 respectively. The mean and standard deviation for the college father is 112.15 and 16.83 respectively. **The students whose fathers have college background shows high level of Mobile phone usage than others.**

It is inferred from the above table that 10.55 percent of the respondent's mother qualified are illiterate, 78.88 percent of the respondent's mother qualified are school education, 2.77 percent of the respondent's mother qualified are Diploma and 7.77 percent of the respondent's mother qualified are college. The mean and standard deviation for the illiterate mother is 104.05 and 19.64 respectively. The mean and standard deviation for the school education mother is 112.04 and 17.72 respectively. The mean and standard deviation for the diploma mother is 93.00 and 22.,80 respectively. The mean and standard deviation for the college mother are 103.92 and 19.66 respectively. **The students whose mothers had their school education shows high level of mobile phone usage than others.**

It is inferred from the above table that 76.66 percent of the respondents are in nuclear family, 18.88 percent of the respondents are in Joint family and 4.44 percent of the respondents are in Single parent. The mean and standard deviation for Nuclear family is 108.81 and 18.31 respectively. The mean and standard deviation for Joint family is 115.85 and 18.50 respectively. The mean and standard deviation for Single parent is 106.62 and 20.22 respectively. **The joint Family Student show high level of Mobile phone usage than the others.**

It is inferred from the above table that, 33.33 percent of the respondents are studying in Government School, 38.33 percent of the respondents are studying in Private School and 28.33

percent of the respondents are studying in Aided school. The mean and standard deviation for the Government Students is 110.03 and 22.10 respectively. The mean and standard deviation for the Private Students is 108.46 and 17,17 respectively. The mean and standard deviation for the Aided Students is 112.19 and15.67 respectively. **The Aided school Students shows high level of Mobile phone usage than the others.**

It is inferred from the above table that,10.55 percent of the respondents are scored 40-49 percent mark in 10th , 12.77 percent of the respondents are scored 50-59 percent mark in 10th, 23.88 percent of the respondents are scored 60-69 percent mark in 10th , 23.88 percent of the respondents are scored 70-79 percent mark in 10th , 24.44 percent of the respondents are scored 80-89 percent mark in 10th and 4.44 percent of the respondents are scored 90-100 percent mark in 10th. The mean and standard deviation for the 40- 49 percent mark in 10th Students are 113.36 and 22.36 respectively. The mean and standard deviation for the 50-59 percent mark in 10th Students are 111.56 and 20.84 respectively. The mean and standard deviation for the 60-69 percent mark in 10th Students are 111.32 and 19.63 respectively. The mean and standard deviation for the 70-79 percent mark in 10th Students are 105.55 and 15.57 respectively. The mean and standard deviation for the 80-89 percent mark in 10th Students are 112.15 and 15.59 respectively. The mean and standard deviation for the 90-99 percent mark in 10th Students are 103.37 and 25.14 respectively. **The students who scores 40-49 % of marks in their SSLC exam shows high level of Mobile phone usage than the others.**

It is inferred from the above table that, 11.11 percent of the respondents' are in Maths and computer science group, 41.66 percent of the respondents' are in Maths and Biology group, 21.11 percent of the respondents' are in computer science and commerce group, 2.77 percent of the respondents' are in Commerce and History group and 23.33 percent of the respondents' are in Pure Science group. The mean and standard deviation for the Maths and computer science is 116.60 and15.59 respectively. The mean and standard deviation for the Maths and biology are 109.98 and 16.95 respectively. The mean and standard deviation for the Commerce and Computer science is 108.89 and 17.50 respectively. The mean and standard deviation for the Commerce and History are 112.80 and 13.47 respectively. The mean and standard deviation for the pure science is 107.73 and 23.39 respectively. **The maths and computer science group students show high level of Mobile phone usage than others.**

It is inferred from the above table that 16.66 percent of the respondents have their own mobile and 83.33percent of the respondents does not have their own mobile. The mean and standard deviation for the students has their own mobile are 113.60 and 13.45 respectively. The mean and standard deviation for the Students does not have their own mobile are 109.33 and 19.36 respectively. **The students who use their own mobile shows high level of mobile phone usage than others.**

It is inferred from the above table that, 25 percent of the respondents are spending 0-hour mobile phone usage for chatting, 63.33 percent of the respondents are spending 1-2-hour mobile phone usage for chatting and 11.66 percent of the respondents are spending 3-4-hour mobile phone usage for chatting. The mean and standard deviation for spending 0-hour mobile phone usage for chatting are 104.55 and 17.98 respectively. The mean and standard deviation for spending 1-2-hour mobile phone usage for chatting are 111.79 and 18.78 respectively. The mean and standard deviation for spending 3-4-hour mobile phone usage for chatting are 112.28 and 16.80 respectively. **The students who spent 3-4hours with mobile for chatting shows high level of mobile phone usage than others.**

It is inferred from the above table that,32.77 percent of the respondents are spending 0-hour mobile phone usage for education,56.66 percent of the respondents are spending 1-2-hour mobile phone usage for education and 10.55percent of the respondents are spending 3-4hour mobile phone usage for education. The mean and standard deviation for spending 0-hour mobile phone usage for education are 106.42 and19.60 respectively. The mean and standard deviation for spending 1-2-hour mobile phone usage for education are 111.41 and18.26 respectively. The mean and standard deviation for spending 3-4-hour mobile phone usage for education are 113.94 and 15.52 respectively. **The students who spent 3-4 hours with mobile for education shows high level of mobile phone usage than others.**

It is inferred from the above table that, 74.44 percent of the respondents do not have followers in Facebook, 11.11 percent of the respondents have 1-50 followers in Facebook, 6.11 percent of the respondents have 51 – 100 followers in Facebook and 8.33 percent of the respondents have 101-150 followers in Facebook. The mean and standard deviation for no Facebook followers is 107.65 and 19.32 respectively. The mean and standard deviation for 1-50 Facebook followers are 115.05 and 17.56 respectively. The mean and standard deviation for 51-100 Facebook followers are 122.72 and 10.08 respectively. The mean and standard deviation for 101-150 Facebook followers are 115.40 and 10.54 respectively. **The students who have 51-100 Facebook followers shows high level of Mobile phone usage than others.**

It is inferred from the above table that, 26.66 percent of the respondents do not know learning apps, 59.44 percent of the respondents know 1- 5 learning apps, 11.66 percent of the respondents know 6-10 learning apps and 2.22 percent of the respondents know 11-15 learning apps. The mean and standard deviation for those who don’t know any learning apps are 107.47 and 22.26 respectively. The mean and standard deviation for those who know 1-5 learning apps are 110.00 and 18.01 respectively. The mean and standard deviation for those who know 6-10 learning apps are 114.42 and 11.53 respectively. The mean and standard deviation for those who know 11-15 learning apps are 118.75 and 8.05 respectively. **The students who known 11-15 learning app shows high level of mobile phone usage.**

Table- 4.4

t- TEST SHOWING RELATIONSHIP BETWEEN MOBILE PHONE USAGE, ITS DIMENSIONS AND GENDER

	Gender	N	Mean	Std. Deviation	t-value	Result at 5% level of Significance
Personal	Female	118	13.0763	4.05340	-1.77	NS
	Male	62	14.2258	4.27505		
Educational	Female	118	47.6949	9.16749	-1.22	NS
	Male	62	49.5484	10.54837		
Communicational	Female	118	22.8220	4.66416	-4.17	S
	Male	62	25.8710	4.64999		
Hobbies	Female	118	23.2373	5.21615	-4.14	S
	Male	62	26.5161	4.71044		
Total	Female	118	106.8305	18.39514	-3.29	S
	Male	62	116.1613	17.38870		

The above table 4.4 exhibits the details of Mean, Standard Deviation and t-value relationship between Mobile Phone usages, its Dimensions and Gender.

It is inferred from the obtained t-value there is no significant difference in Female and Male students' mobile phone for personal usage. Since the calculated t-value (-1.77) is not significant at 0.05% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the Female and Male student do not differ in their personal usage of mobile phone.**

It is inferred from the obtained t-value there is no significant differences in Female and Male students' mobile phone usage for Educational. Since the calculated t-value (-1.22) is not significant at 0.05% level.so the null hypothesis is accepted and alternate hypothesis is rejected.

Therefore, it is concluded that the Female and Male student do not differ in their educational usage of mobile phone

It is inferred from the obtained t-value there is a significant difference in Female and Male students' mobile phone usage for Communication. Since the calculated t-value (-4.17) is significant at 0.05% level. So, the null hypothesis is rejected and alternate hypothesis is accepted. **Therefore, it is concluded that the Female and Male student differ in their Mobile Phone Usage for Communication.**

It is inferred from the obtained t-value there is a significant difference in Female and Male students' mobile phone usage for hobbies. Since the calculated t-value (-4.14) is significant at 0.05% level. So, the null hypothesis is rejected and alternate hypothesis is accepted. **Therefore, it is concluded that the Female and Male student differ in their Mobile Phone Usage for Hobbies.**

It is inferred from the obtained t-value there is a significant difference in Female and Male students' mobile phone usage for total. Since the calculated t-value (-3.29) is significant at 0.05% level. So, the null hypothesis is rejected and alternate hypothesis is accepted. **Therefore, it is concluded that the Female and Male student differ in their Mobile Phone Usage for total.**

Table- 4.5

t- TEST SHOWING RELATIONSHIP BETWEEN MOBILE PHONE USAGE, ITS DIMENSIONS AND MOTHER'S ANNUAL INCOME

	MOTHER'S ANNUAL INCOME	N	Mean	Std. Deviation	t-value	Result at 5% level of Significance
Personal	No income	159	13.5031	4.11677	.27	NS
	Income	21	13.2381	4.53767		
Educational	No income	159	48.5346	9.27483	.61	NS
	Income	21	46.8095	12.47645		
Communicational	No income	159	23.8428	4.79126	-.22	NS
	Income	21	24.0952	5.53990		
Hobbies	No income	159	24.2075	5.30473	-1.12	NS
	Income	21	25.5714	4.96560		
total	No income	159	110.0881	17.86071	.09	NS
	Income	21	109.7143	23.63079		

The above table 4.5 exhibits the details of Mean, Standard Deviation and t-value relationship between Mobile Phone Usages, its Dimensions and Mother annual income.

It is inferred from the obtained t-value there is no significant difference in mother's nil income and mother's Income students **Mobile Phone for Personal Usage.** Since the calculated t-value (.27) is not significant at 0.05% level.so the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the mother's Nil income and mother's Income student do not differ in their personal usage of mobile phone.**

It is inferred from the obtained t-value there is no significant difference in mother's Nil income and mother's Income students **Mobile Phone Usage for Educational.** Since the calculated t-value (.61) is not significant at 0.05% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the mother's Nil income and mother's Income student do not differ in their educational usage of mobile phone.**

It is inferred from the obtained t-value there is no significant difference in mother's Nil income and mother's Income students **Mobile Phone Usage for Communication.** Since the calculated t-value (-.22) is not significant at 0.05% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the mother's Nil income and mother's Income student do not differ in their Mobile Phone Usage for Communication.**

It is inferred from the obtained t-value there is no significant difference in mother's Nil income and mother's Income students **Mobile Phone Usage for Hobbies.** Since the calculated t-value (-1.12) is not significant at 0.05% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the mother's Nil income and mother's Income student do not differ in their Mobile Phone Usage for Hobbies.**

It is inferred from the obtained t-value there is no significant difference in mother's Nil income and mother's Income students **Mobile Phone Usage for total.** Since the calculated t-value (.09) is not significant at 0.05% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the mother's Nil income and mother's Income student do not differ in their Mobile Phone Usage for total.**

Table- 4.6

t- TEST SHOWING RELATIONSHIP BETWEEN MOBILE PHONE USAGE, ITS DIMENSIONS AND THEIR OWN MOBILE

	Own mobile	**N**	**Mean**	**Std. Deviation**	**t-value**	**Result at 5% level of Significance**
Personal	yes	30	13.0667	4.00804	-.59	NS
	no	150	13.5533	4.19257		
Educational	yes	30	46.7667	9.63357	-.97	NS
	no	150	48.6467	9.68645		
Communicational	yes	30	27.2333	3.68298	4.35	S
	no	150	23.2000	4.80632		
Hobbies	yes	30	26.5333	4.23233	2.50	S
	no	150	23.9333	5.36289		
total	yes	30	113.6000	13.45901	1.46	NS
	no	150	109.3333	19.36324		

The above table 4.5 exhibits the details of Mean, Standard Deviation and t-value relationship between Mobile Phone Usages, its Dimensions and their Own mobile.

It is inferred from the obtained t-value there is no significant difference in with mobile phone and without mobile phone students for Personal Usage**.** Since the calculated t-value (-.59) is not significant at 0.05% level. So, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the students with their own mobile phone and without their own mobile phone do not differ in their Personal Usage.**

It is inferred from the obtained t-value there is no significant difference in with mobile phone and without mobile phone students for Educational usage Since the calculated t-value (-.97) is not significant at 0.05% level. so, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the students with their own mobile phone and without their own mobile phone do not differ in their Educational Usage.**

It is inferred from the obtained t-value there is a significant difference in with mobile phone and without mobile phone students for Communicational usage Since the calculated t-value (4.35) is significant at 0.05% level. so, the null hypothesis is rejected and alternate hypothesis is accepted. **Therefore, it is concluded that the students with their mobile phone and without their own mobile phone differ in their Communicational Usage.**

It is inferred from the obtained t-value there is a significant difference in with mobile phone and without mobile phone students for Hobbies usage Since the calculated t-value (2.50) is significant at 0.05% level. so, the null hypothesis is rejected and alternate hypothesis is accepted. **Therefore, it is concluded that the students with their mobile phone and without their own mobile phone differ in their Hobbies Usage.**

It is inferred from the obtained t-value there is no significant difference in with mobile phone and without mobile phone students for Total Since the calculated t-value (1.46) is not significant at 0.05% level. so, the null hypothesis is accepted and alternate hypothesis is rejected. **Therefore, it is concluded that the students with their own mobile phone and without their own mobile phone do not differ in their Total.**

Table – 4.7

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR FATHER'S OCCUPATION

		Sum of Squares	**df**	**Mean Square**	**'F' value**	**Significance at 5% level**
Personal	Between Groups	74.172	5	14.834	.86	NS
	Within Groups	3016.689	174	17.337		
	Total	3090.861	179			
Educational	Between Groups	220.498	5	44.100	.46	NS
	Within Groups	16539.502	174	95.055		
	Total	16760.000	179			
Communicational	Between Groups	104.326	5	20.865	.88	NS
	Within Groups	4137.736	174	23.780		
	Total	4242.061	179			
Hobbies	Between Groups	172.383	5	34.477	1.25	NS
	Within Groups	4801.417	174	27.594		
	Total	4973.800	179			
Total	Between Groups	1147.429	5	229.486	.66	NS
	Within Groups	60426.216	174	347.277		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student's mobile phone usage in respect of their father's occupation 'F' value is calculated.

It is inferred from obtained **f value** there is no significant difference in father's occupation in their mobile phone for personal usage. Since calculated f-value (.86) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's Occupation do not differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in father's occupation in their mobile phone usage for educational. Since calculated f-value (.46) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's Occupation do not differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in father's occupation in their mobile phone usage for communication. Since calculated f-value (.88) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's Occupation do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is no significant difference in father's occupation in their mobile phone usage for hobbies. Since calculated f-value (1.25) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's Occupation do not differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in father's occupation in their mobile phone usage in total. Since calculated f-value (.66) which is not significant at 5% level. so the null hypothesis is accepted. **Therefore, the students with different father's Occupation do not differ in their mobile phone usage in total.**

Table - 4.8

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR MOTHER'S OCCUPATION

		Sum of Squares	**Df**	**Mean Square**	**'F' value**	**Significance at 5% level**
Personal	Between Groups	67.563	3	22.521	1.31	NS
	Within Groups	3023.298	176	17.178		
	Total	3090.861	179			
Educational	Between Groups	267.218	3	89.073	.95	NS
	Within Groups	16492.782	176	93.709		
	Total	16760.000	179			
Communicational	Between Groups	28.334	3	9.445	.39	NS
	Within Groups	4213.727	176	23.942		
	Total	4242.061	179			
Hobbies	Between Groups	54.225	3	18.075	.65	NS
	Within Groups	4919.575	176	27.952		
	Total	4973.800	179			
Total	Between Groups	93.834	3	31.278	.09	NS
	Within Groups	61479.810	176	349.317		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student's mobile phone usage in respect of their mother's occupation 'F' value is calculated.

It is inferred from obtained **f value** there is no significant difference in mother's occupation in their mobile phone for personal usage. Since calculated f-value (1.31) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different mother's qualification do not differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in mother's occupation in their mobile phone usage for educational. Since calculated f-value (.95) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different mother's qualification do not differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in mother's occupation in their mobile phone usage for communication. Since calculated f-value (.39) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different mother's qualification do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is no significant difference in mother's occupation in their mobile phone usage for hobbies. Since calculated f-value (.65) which is not significant at 5% level.so the null hypothesis is accepted. **Therefore, the students with different mother's qualification do not differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in mother's occupation in their mobile phone usage in total. Since calculated f-value (.09) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different mother's qualification do not differ in their mobile phone usage in total.**

Table-4.9

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR LOCALITY

		Sum of Squares	**df**	**Mean Square**	**‘F’ value**	**Significance at 5% level**
Personal	Between Groups	19.058	2	9.529	.55	NS
	Within Groups	3071.803	177	17.355		
	Total	3090.861	179			
Educational	Between Groups	31.842	2	15.921	.17	NS
	Within Groups	16728.158	177	94.509		
	Total	16760.000	179			
Communicational	Between Groups	27.394	2	13.697	.58	NS
	Within Groups	4214.667	177	23.812		
	Total	4242.061	179			
Hobbies	Between Groups	18.485	2	9.242	.33	NS
	Within Groups	4955.315	177	27.996		
	Total	4973.800	179			
Total	Between Groups	52.299	2	26.149	.08	NS
	Within Groups	61521.346	177	347.578		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student’s mobile phone usage in respect of their locality ‘F’ value is calculated.

It is inferred from obtained **f value** there is no significant difference in locality in their mobile phone for personal usage. Since calculated f-value (.55) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different locality do not differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in locality in their mobile phone usage for educational. Since calculated f-value (.17) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different locality do not differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in locality in their mobile phone usage for communication. Since calculated f-value (.58) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different locality do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is no significant difference in locality in their mobile phone usage for hobbies. Since calculated f-value (.33) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different locality do not differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in locality in their mobile phone usage in total. Since calculated f-value (.08) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different locality do not differ in their mobile phone usage in total.**

Table-4.10

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR FATHER'S ANNUAL INCOME

		Sum of Squares	**df**	**Mean Square**	**'F' value**	**Significance at 5% level**
Personal	Between Groups	42.360	5	8.472	.48	NS
	Within Groups	3048.502	174	17.520		
	Total	3090.861	179			
Educational	Between Groups	507.276	5	101.455	1.09	NS
	Within Groups	16252.724	174	93.406		
	Total	16760.000	179			
Communicational	Between Groups	321.155	5	64.231	2.85	NS
	Within Groups	3920.906	174	22.534		
	Total	4242.061	179			
Hobbies	Between Groups	156.341	5	31.268	1.13	NS
	Within Groups	4817.459	174	27.687		
	Total	4973.800	179			
Total	Between Groups	1750.178	5	350.036	1.02	NS
	Within Groups	59823.467	174	343.813		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student's mobile phone usage in respect of their father's annual income 'F' value is calculated.

It is inferred from obtained **f value** there is no significant difference in father's annual income in their mobile phone for personal usage. Since calculated f-value (.48) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's annual income do not differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in father's annual income in their mobile phone usage for educational. Since calculated f-value (1.09) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's annual income do not differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in father's annual income in their mobile phone usage for communication. Since calculated f-value (2.85) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's annual income do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is no significant difference in father's annual income in their mobile phone usage for hobbies. Since calculated f-value (1.13) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's annual income do not differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in father's annual income in their mobile phone usage in total. Since calculated f-value (1.02) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's annual income do not differ in their mobile phone usage in total.**

Table-4.11

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR FATHER'S QUALIFICATION

		Sum of Squares	df	Mean Square	**'F' value**	**Significance at 5% level**
Personal	Between Groups	109.888	3	36.629	2.16	NS
	Within Groups	2980.973	176	16.937		
	Total	3090.861	179			
Educational	Between Groups	80.170	3	26.723	.28	NS
	Within Groups	16679.830	176	94.772		
	Total	16760.000	179			
Communicational	Between Groups	40.170	3	13.390	.56	NS
	Within Groups	4201.892	176	23.874		
	Total	4242.061	179			
Hobbies	Between Groups	7.826	3	2.609	.09	NS
	Within Groups	4965.974	176	28.216		
	Total	4973.800	179			
Total	Between Groups	298.336	3	99.445	.29	NS
	Within Groups	61275.309	176	348.155		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student's mobile phone usage in respect of their father's qualification 'F' value is calculated.

It is inferred from obtained **f value** there is no significant difference in father's qualification in their mobile phone for personal usage. Since calculated f-value (2.16) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's qualification do not differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in father's qualification in their mobile phone usage for educational. Since calculated f-value (.28) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's qualification do not differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in father's qualification in their mobile phone usage for communication. Since calculated f-value (.56) which is not significant at 5% level.so the null hypothesis is accepted. **Therefore, the students with different father's qualification do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is no significant difference in father's qualification in their mobile phone usage for hobbies. Since calculated f-value (.09) which is not significant at 5% level. so, the null hypothesis is accepted. **Therefore, the students with different father's qualification do not differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in father's qualification in their mobile phone usage in total. Since calculated f-value (.29) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different father's qualification do not differ in their mobile phone usage in total.**

Table-4.12

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR MOTHER QUALIFICATION

		Sum of Squares	df	Mean Square	**'F' value**	**Significance at 5% level**
Personal	Between Groups	63.784	3	21.261	1.24	NS
	Within Groups	3027.077	176	17.199		
	Total	3090.861	179			
Educational	Between Groups	1070.837	3	356.946	4.00	S
	Within Groups	15689.163	176	89.143		
	Total	16760.000	179			
Communicational	Between Groups	47.130	3	15.710	.66	NS
	Within Groups	4194.931	176	23.835		
	Total	4242.061	179			
Hobbies	Between Groups	107.486	3	35.829	1.30	NS
	Within Groups	4866.314	176	27.650		
	Total	4973.800	179			
Total	Between Groups	3229.114	3	1076.371	3.25	S
	Within Groups	58344.531	176	331.503		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student's mobile phone usage in respect of their mother's qualification 'F' value is calculated.

It is inferred from obtained **f value** there is no significant difference in mother's qualification in their mobile phone for personal usage. Since calculated f-value (1.24) which is not significant at 5% level. so, the null hypothesis is accepted. **Therefore, the students with different mother's qualification do not differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is a significant difference in mother's qualification in their mobile phone usage for educational. Since calculated f-value (4.00) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different mother's qualification differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in mother's qualification in their mobile phone usage for communication. Since calculated f-value (.66) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different mother's qualification do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is no significant difference in mother's qualification in their mobile phone usage for hobbies. Since calculated f-value (1.30) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different mother's qualification do not differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is a significant difference in mother's qualification in their mobile phone usage in total. Since calculated f-value (3.25) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different mother's qualification differ in their mobile phone usage in total.**

Table-4.13

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR TYPE OF FAMILY

		Sum of Squares	df	Mean Square	**‘F’ value**	**Significance at 5% level**
Personal	Between Groups	6.521	2	3.261	.19	NS
	Within Groups	3084.340	177	17.426		
	Total	3090.861	179			
Educational	Between Groups	838.318	2	419.159	4.66	S
	Within Groups	15921.682	177	89.953		
	Total	16760.000	179			
Communicational	Between Groups	82.027	2	41.013	1.75	NS
	Within Groups	4160.035	177	23.503		
	Total	4242.061	179			
Hobbies	Between Groups	12.640	2	6.320	.23	NS
	Within Groups	4961.160	177	28.029		
	Total	4973.800	179			
Total	Between Groups	1450.403	2	725.202	2.14	NS
	Within Groups	60123.241	177	339.679		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student’s mobile phone usage in respect of their type of family ‘F’ value is calculated.

It is inferred from obtained **f value** there is no significant difference in type of family in their mobile phone for personal usage. Since calculated f-value (.19) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different type of family do not differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is a significant difference in type of family in their mobile phone usage for educational. Since calculated f-value (4.66) which is significant at 5% level. So, the alternative hypothesis is accepted. **Therefore, the students with different type of family do differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in type of family in their mobile phone usage for communication. Since calculated f-value (1.75) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different type of family do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is no significant difference in type of family in their mobile phone usage for hobbies. Since calculated f-value (.23) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different type of family do not differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in type of family in their mobile phone usage in total. Since calculated f-value (2.14) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different type of family do not differ in their mobile phone usage in total.**

Table-4.14

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR TYPE OF SCHOOL

		Sum of Squares	df	Mean Square	**'F' value**	**Significance at 5% level**
Personal	Between Groups	157.481	2	78.740	4.75	S
	Within Groups	2933.380	177	16.573		
	Total	3090.861	179			
Educational	Between Groups	315.951	2	157.976	1.70	NS
	Within Groups	16444.049	177	92.904		
	Total	16760.000	179			
Communicational	Between Groups	57.994	2	28.997	1.23	NS
	Within Groups	4184.067	177	23.639		
	Total	4242.061	179			
Hobbies	Between Groups	173.564	2	86.782	3.20	S
	Within Groups	4800.236	177	27.120		
	Total	4973.800	179			
Total	Between Groups	408.512	2	204.256	.59	NS
	Within Groups	61165.132	177	345.566		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student's mobile phone usage in respect of their type of school 'F' value is calculated.

It is inferred from obtained **f value** there is a significant difference in type of school in their mobile phone for personal usage. Since calculated f-value (4.75) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different type of school differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in type of school in their mobile phone usage for educational. Since calculated f-value (1.70) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different type of school do not differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in type of school in their mobile phone usage for communication. Since calculated f-value (1.23) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different type of school do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is a significant difference in type of school in their mobile phone usage for hobbies. Since calculated f-value (3.20) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different type of school differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in type of school in their mobile phone usage in total. Since calculated f-value (.59) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different type of school do not differ in their mobile phone usage in total.**

Table-4.15

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR SSLC MARKS

		Sum of Squares	df	Mean Square	**'F' value**	**Significance at 5% level**
Personal	Between Groups	220.181	5	44.036	2.67	S
	Within Groups	2870.680	174	16.498		
	Total	3090.861	179			
Educational	Between Groups	331.188	5	66.238	.70	NS
	Within Groups	16428.812	174	94.418		
	Total	16760.000	179			
Communicational	Between Groups	104.419	5	20.884	.88	NS
	Within Groups	4137.642	174	23.780		
	Total	4242.061	179			
Hobbies	Between Groups	368.410	5	73.682	2.78	S
	Within Groups	4605.390	174	26.468		
	Total	4973.800	179			
Total	Between Groups	1751.763	5	350.353	1.02	NS
	Within Groups	59821.881	174	343.804		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student's mobile phone usage in respect of their SSLC marks 'F' value is calculated.

It is inferred from obtained **f value** there is a significant difference in SSLC marks in their mobile phone for personal usage. Since calculated f-value (2.67) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different SSLC marks differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in SSLC marks in their mobile phone usage for educational. Since calculated f-value (.70) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different SSLC marks do not differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in SSLC marks in their mobile phone usage for communication. Since calculated f-value (.88) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different SSLC marks do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is a significant difference in SSLC marks in their mobile phone usage for hobbies. Since calculated f-value (2.78) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different SSLC marks differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in SSLC marks in their mobile phone usage in total. Since calculated f-value (1.02) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different SSLC marks do not differ in their mobile phone usage in total.**

Table-4.16

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR GROUP

		Sum of Squares	df	Mean Square	**'F' value**	**Significance at 5% level**
Personal	Between Groups	76.481	4	19.120	1.11	NS
	Within Groups	3014.380	175	17.225		
	Total	3090.861	179			
Educational	Between Groups	674.815	4	168.704	1.84	NS
	Within Groups	16085.185	175	91.915		
	Total	16760.000	179			
Communicational	Between Groups	141.332	4	35.333	1.51	NS
	Within Groups	4100.729	175	23.433		
	Total	4242.061	179			
Hobbies	Between Groups	353.530	4	88.383	3.35	S
	Within Groups	4620.270	175	26.402		
	Total	4973.800	179			
Total	Between Groups	1171.360	4	292.840	.85	NS
	Within Groups	60402.285	175	345.156		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student's mobile phone usage in respect of their group 'F' value is calculated.

It is inferred from obtained **f value** there is no significant difference in group in their mobile phone for personal usage. Since calculated f-value (1.11) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different group do not differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in group in their mobile phone usage for educational. Since calculated f-value (1.84) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different group do not differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in group in their mobile phone usage for communication. Since calculated f-value (1.51) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different group do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is a significant difference in group in their mobile phone usage for hobbies. Since calculated f-value (3.35) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different group differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in group in their mobile phone usage in total. Since calculated f-value (.85) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different group do not differ in their mobile phone usage in total.**

Table-4.17

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR TIME SPEND FOR MOBILE

		Sum of Squares	df	Mean Square	**'F' value**	**Significance at 5% level**
Personal	Between Groups	75.997	2	37.999	2.23	NS
	Within Groups	3014.864	177	17.033		
	Total	3090.861	179			
Educational	Between Groups	432.556	2	216.278	2.35	NS
	Within Groups	16327.444	177	92.245		
	Total	16760.000	179			
Communicational	Between Groups	90.543	2	45.272	1.93	NS
	Within Groups	4151.518	177	23.455		
	Total	4242.061	179			
Hobbies	Between Groups	380.282	2	190.141	7.33	S
	Within Groups	4593.518	177	25.952		
	Total	4973.800	179			
Total	Between Groups	1811.888	2	905.944	2.68	NS
	Within Groups	59761.756	177	337.637		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student's mobile phone usage in respect of their time spend for chatting 'F' value is calculated.

It is inferred from obtained **f value** there is no significant difference in time spend for chatting in their mobile phone for personal usage. Since calculated f-value (2.23) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different time spent for chatting do not differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in time spend for chatting in their mobile phone usage for educational usage. Since calculated f-value (2.35) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different time spent for chatting do not differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in time spend for chatting in their mobile phone usage for communication. Since calculated f-value (1.93) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different time spent for chatting do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is a significant difference in time spend for chatting in their mobile phone usage for hobbies. Since calculated f-value (7.33) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different time spent for chatting differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in time spend for chatting in their mobile phone usage in total. Since calculated f-value (2.68) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different time spent for chatting do not differ in their mobile phone usage in total.**

Table-4.18

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR TIME SPEND FOR EDUCATION

		Sum of Squares	df	Mean Square	**'F' value**	**Significance at 5% level**
Personal	Between Groups	103.617	2	51.808	3.07	S
	Within Groups	2987.244	177	16.877		
	Total	3090.861	179			
Educational	Between Groups	894.486	2	447.243	4.99	S
	Within Groups	15865.514	177	89.636		
	Total	16760.000	179			
Communicational	Between Groups	4.649	2	2.325	.10	NS
	Within Groups	4237.412	177	23.940		
	Total	4242.061	179			
Hobbies	Between Groups	139.617	2	69.809	2.56	NS
	Within Groups	4834.183	177	27.312		
	Total	4973.800	179			
Total	Between Groups	1253.584	2	626.792	1.84	NS
	Within Groups	60320.060	177	340.791		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student's mobile phone usage in respect of their time spend for education 'F' value is calculated.

It is inferred from obtained **f value** there is a significant difference in time spend for education in their mobile phone for personal usage. Since calculated f-value (3.07) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different time spent for education differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is a significant difference in time spend for education in their mobile phone usage for educational. Since calculated f-value (4.99) which is significant at 5% level.so, the alternate hypothesis is accepted. **Therefore, the students with different time spent for education differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in time spend for education in their mobile phone usage for communication. Since calculated f-value (.10) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different time spent for education do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is no significant difference in time spend for education in their mobile phone usage for hobbies. Since calculated f-value (2.56) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different time spent for education do not differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in time spend for education in their mobile phone usage in total. Since calculated f-value (1.84) which is not significant at 5% level.so the null hypothesis is accepted. **Therefore, the students with different time spent for education does not differ in their mobile phone usage in total.**

Table-4.19

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR FACE BOOK FOLLOWERS

		Sum of Squares	df	Mean Square	F	Sig.
personal	Between Groups	89.333	3	29.778	1.75	NS
	Within Groups	3001.528	176	17.054		
	Total	3090.861	179			
educational	Between Groups	274.864	3	91.621	.98	NS
	Within Groups	16485.136	176	93.666		
	Total	16760.000	179			
communicational	Between Groups	435.528	3	145.176	6.71	S
	Within Groups	3806.533	176	21.628		
	Total	4242.061	179			
hobbies	Between Groups	463.621	3	154.540	6.03	S
	Within Groups	4510.179	176	25.626		
	Total	4973.800	179			
total	Between Groups	3464.704	3	1154.901	3.50	S
	Within Groups	58108.941	176	330.164		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student’s mobile phone usage in respect of their face book followers ‘F’ value is calculated.

It is inferred from obtained **f value** there is no significant difference in face book followers in their mobile phone for personal usage. Since calculated f-value (1.75) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different face book followers do not differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in face book followers in their mobile phone usage for educational. Since calculated f-value (.98) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different face book followers do not differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is a significant difference in face book followers in their mobile phone usage for communication. Since calculated f-value (6.71) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different face book followers differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is a significant difference in face book followers in their mobile phone usage for hobbies. Since calculated f-value (6.03) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different face book followers differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is a significant difference in face book followers in their mobile phone usage in total. Since calculated f-value (3.50) which is significant at 5% level. So, the alternate hypothesis is accepted. **Therefore, the students with different face book followers differ in their mobile phone usage in total.**

Table-4.20

SIGNIFICANT DIFFERENCE AMONG MOBILE PHONE USAGE AND ITS DIMENSIONS, RESPECT OF THEIR KNOWN LEARNING APP

		Sum of Squares	df	Mean Square	F	Sig.
personal	Between Groups	85.127	3	28.376	1.66	NS
	Within Groups	3005.734	176	17.078		
	Total	3090.861	179			
educational	Between Groups	450.872	3	150.291	1.62	NS
	Within Groups	16309.128	176	92.666		
	Total	16760.000	179			
communicational	Between Groups	132.442	3	44.147	1.89	NS
	Within Groups	4109.619	176	23.350		
	Total	4242.061	179			
hobbies	Between Groups	37.046	3	12.349	.44	NS
	Within Groups	4936.754	176	28.050		
	Total	4973.800	179			
total	Between Groups	1022.782	3	340.927	.99	NS
	Within Groups	60550.863	176	344.039		
	Total	61573.644	179			

In order to find out whether there is any significant difference among student's mobile phone usage in respect of their learning app 'F' value is calculated.

It is inferred from obtained **f value** there is no significant difference in known learning app in their mobile phone for personal usage. Since calculated f-value (1.66) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different known learning app do not differ in their personal usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in known learning app in their mobile phone usage for educational. Since calculated f-value (1.62) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different known learning app do not differ in their educational usage of mobile phone.**

It is inferred from obtained **f value** there is no significant difference in known learning app in their mobile phone usage for communication. Since calculated f-value (1.89) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different known learning app do not differ in their mobile phone usage for communication.**

It is inferred from obtained **f value** there is no significant difference in known learning app in their mobile phone usage for hobbies. Since calculated f-value (0.44) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different known learning app do not differ in their mobile phone usage for hobbies.**

It is inferred from obtained **f value** there is no significant difference in known learning app in their mobile phone usage in total. Since calculated f-value (0.99) which is not significant at 5% level. So, the null hypothesis is accepted. **Therefore, the students with different known learning app do not differ in their mobile phone usage in total.**

Table 4.21

Correlation

	Mother occupation	Locality	Father annual income	Mother annual income	Gender	Father qualification	Mother qualification	Type of family	Type of school	SSLC mark	Group	Own Mobile	Time spend mobile	Time for education		Learning app	Personal	Educational	Communicational	Hobbies	Total
Father occupation	.12	.23**	-.13	.14	-.34**	.12	.11	.12	.04	.21**	-.01	.16*	-.03	.07	-.10	.11	-.10	-.04	-.04	-.17*	-.10
Mother occupation		-.09	-.23**	.60**	.01	-.01	.14	.22**	-.11	-.09	.08	-.06	.10	-.08	.11	-.01	.04	-.06	.04	.06	.01
Locality			-.00	-.03	-.18*	-.01	-.02	-.07	-.04	-.11	.23**	.03	.02	.07	-.07	.09	-.06	.02	.08	-.06	-.00
Father Annual Income				-.22**	.03	-.06	-.14	-.21**	-.03	-.05	.08	.01	.02	.04	.02	-.05	.01	-.09	.03	-.06	-.05
Mother Annual Income					.03	.09	.09	.17*	-.15*	-.10	.14	-.07	.05	-.07	.09	-.05	-.02	-.06	.02	.08	-.01
Gender						-.03	-.05	.06	.17*	-.26**	-.13	-.46**	.03	-.04	.48**	.08	.13	.09	.30**	.30**	.24**
Father Qualification							.23**	-.17*	.15*	.23**	-.21**	-.05	-.03	-.07	.04	.11	-.11	.04	.07	-.02	.01
Mother Qualification								-.05	.10	.24**	-.14	-.11	.13	-.03	.16*	.13	-.07	-.08	.01	-.04	-.07
Type of Family									-.02	-.14	-.01	.04	.06	.05	.02	-.09	.05	.16*	-.05	.00	.08
Type of School										.41**	-.49**	-.22**	-.19**	.06	.13	.26**	-.09	.13	.12	-.13	.04
SSLC mark											-.46**	-.03	-.11	.13	.02	.26**	-.19*	.08	-.03	-.22**	-.07
Group												.17*	.10	-.01	-.19*	-.12	.06	-.15*	-.11	-.01	-.10
Own Mobile													-.20**	.06	-.57**	-.07	.04	.07	-.31**	-.18*	-.09
Time spend mobile														.07	.31**	-.16*	.13	.02	.15	.26**	.15*
Time for education															-.07	.26**	.13	.21**	.03	-.03	.14
Facebook followers																.10	.11	.02	.31**	.29**	.20**
Known Learning app																	.03	.16*	.18*	-.04	.13
Personal																		.44**	.46**	.45**	.71**
Educational																			.54**	.32**	.85**
Communicational																				.47**	.78**
Hobbies																					.68**
Total	**. Correlation is significant at the 0.01 level (2-tailed). *correlation is significant at the 0.05 level (2-tailed).																				

Coefficient of correlation between father occupation, gender and Hobbies are found to be -0.34 and -0.17 significant at 1% level. **Hence it is concluded that there is negative significant relationship between father occupation, gender and Hobbies.** But correlation between father occupation, locality, SSLC mark and own mobile are found to be 0.23, 0.21 and 0.16 significant at 5% level. **Hence it is concluded that there is positive significant relationship between father occupation, locality, SSLC mark and own mobile.**

Coefficient of correlation between mother occupation and father annual income are found to be -0.23 significant at 1% level. **Hence it is concluded that there is negative significant relationship between mother occupation and father annual income.** But correlation between mother occupation, mother annul income and type of family are found to be 0.60 and 0.22 significant at 5% level. **Hence it is concluded that there is positive significant relationship between mother occupation, mother annual income and type of family.**

Coefficient of correlation between locality and gender are found to be -0.18 significant at 1% level. **Hence it is concluded that there is negative significant relationship between locality and gender.** But correlation between locality and group are found to be 0.23 significant at 5% level. **Hence it is concluded that there is positive significant relationship between locality and group.**

Coefficient of correlation between father annual income, mother annual income and type of family are found to be -0.22 and -0.21 significant at 1% level. **Hence it is concluded that there is negative significant relationship between father annual income, mother annual income and type of family.**

Coefficient of correlation between mother annual income and type of family are found to be 0.17 significant at 5% level. **Hence it is concluded that there is positive significant relationship between mother annual income and type of family.**

Coefficient of correlation between gender, SSLC mark and own mobile are found to be -0.26 and -0.46 significant at 1% level. **Hence it is concluded that there is negative significant relationship between gender, SSLC mark and own mobile.** But correlation between gender, type of school, Facebook followers, communicational, hobbies and total mobile phone usage are found to be 0.17, 0.48, 0.30, 0.30 and 0.24 significant at 5% level. **Hence it is concluded that there is positive significant relationship gender, type of school, Facebook followers, communicational, hobbies and total mobile phone usage.**

Coefficient of correlation between father qualification, type of family and group are found to be -0.17 and -0.21 significant at 1% level. **Hence it is concluded that there is negative significant relationship between father qualification, type of family and group.** But correlation between father qualification, mother qualification, type of school and SSLC mark are found to be 0.23, 0.15 and 0.23 significant at 5% level. **Hence it is concluded that there is positive significant relationship father qualification, mother qualification, type of school and SSLC mark.**

Coefficient of correlation between mother qualification, SSLC mark and FB followers are found to be 0.24 and 0.16 significant at 5% level. **Hence it is concluded that there is positive significant relationship between mother qualification, SSLC mark and Facebook followers.**

Coefficient of correlation between type of family and educational are found to be 0.16 significant at 5% level. **Hence it is concluded that there is positive significant relationship between type of family and educational.**

Coefficient of correlation between type of school, group, own mobile and time spend mobile are found to be -0.49, -0.22 and -0.19 significant at 1% level. **Hence it is concluded that there is negative significant relationship between type of school, group, own mobile and time spend mobile.** But correlation between type of school, SSLC mark and learning app are found to be 0.41 and 0.26 significant at 5% level. **Hence it is concluded that there is positive significant relationship type of school, SSLC mark and known learning app.**

Coefficient of correlation between SSLC mark, group, personal and hobbies are found to be -0.46, -0.19 and -0.22 significant at 1% level. **Hence it is concluded that there is negative significant relationship between SSLC mark, group, personal and hobbies.** But correlation between SSLC mark and learning app are found to be 0.26 significant at 5% level. **Hence it is concluded that there is positive significant relationship SSLC mark and learning app.**

Coefficient of correlation between group, Facebook followers and educational are found to be -0.19 and -0.15 significant at 1% level. **Hence it is concluded that there is negative significant relationship between group, Facebook followers and educational.** But correlation between group and own mobile are found to be 0.17 significant at 5% level. **Hence it is concluded that there is positive significant relationship group and own mobile.**

Coefficient of correlation between own mobile, time spend mobile, Facebook followers, communicational and hobbies are found to be -0.20, -0.57, -0.31 and -0.18 significant at 1% level. **Hence it is concluded that there is negative significant relationship between own mobile, time spend for chatting, Facebook followers, communicational and hobbies.**

Coefficient of correlation between time spend for chatting, Facebook followers, hobbies and total mobile phone usage are found to be 0.31, 0.26 and 0.15 significant at 5%

level. **Hence it is concluded that there is positive significant relationship between time spend for chatting, Facebook followers, hobbies and total mobile phone usage.**

Coefficient of correlation between time spend for education, known learning app and educational are found to be 0.26 and 0.21 significant at 5% level. **Hence it is concluded that there is positive significant relationship between time spend for education, known learning app and educational.**

Coefficient of correlation between Facebook followers, communicational, hobbies and total mobile phone usage are found to be 0.31, 0.29 and 0.20 significant at 5% level. **Hence it is concluded that there is positive significant relationship between Facebook followers, communicational, hobbies and total mobile phone usage.**

Coefficient of correlation between known learning app, educational and communicational are found to be 0.16 and 0.18 significant at 5% level. **Hence it is concluded that there is positive significant relationship between known learning app, educational and communicational.**

Coefficient of correlation between personal, educational, communicational, hobbies and total mobile phone usage are found to be 0.44, 0.46, 0.45 and 0.71 significant at 5% level. **Hence it is concluded that there is positive significant relationship between personal, educational, communicational, hobbies and total mobile phone usage.**

Coefficient of correlation between educational, communicational, hobbies and total mobile phone usage are found to be 0.54, 0.32 and 0.85 significant at 5% level. **Hence it is concluded that there is positive significant relationship between educational, communicational, hobbies and total mobile phone usage.**

Coefficient of correlation between communicational, hobbies and total mobile phone usage are found to be 0.47 and 0.78 significant at 5% level. **Hence it is concluded that there**

is positive significant relationship between communicational, hobbies and total mobile phone usage.

Coefficient of correlation between hobbies and total mobile phone usage are found to be 0.68 significant at 5% level. **Hence it is concluded that there is positive significant relationship between hobbies and total mobile phone usage.**

TABLE 4.22

STEPWISE REGRESSION RESULT BETWEEN TOTAL MOBILE USAGE AND THEIR SUBSAMPLE

Model	B	Std. Error	Beta	Pearson r	Sr^2	Structure Coefficient
(Constant)	89.221	5.649				
gender	9.575	2.809	.246	.240	.060	.848
Time for education	4.472	2.154	.150	.140	.023	.494

Note. The dependent variable is **Mobile usage. R**^{2}= .080, Adjusted R^2= .069, Sr^2 is squared semi-partial correlation. * $p < .05$, F (2,177) =7.683

Table 4.22 shows Father occupation, Mother occupation, locality, Father Annual Income, Mother Annual Income, gender, Father Qualification, Mother Qualification, Type of Family, Type of School, SSLC mark, group, own Mobile time spend mobile, time for education, Face book followers, Known Learning app, and total mobile usage were used in a stepwise multiple regression analysis to predict dominant **mobile related factor**. The correlation of variables is shown in table.4.21 As can be seen correlations with Father occupation, Mother occupation, locality, Father Annual Income, Mother Annual Income, gender, Father Qualification, Mother Qualification, Type of Family, Type of School, SSLC mark, group, own Mobile time spend mobile, time for education, Face book followers, Known Learning app, and total mobile usage were statistically significant.

The prediction model contained two of the ten predictors and was reached in two steps with eight variables removed. The model was statistically significant, F (2,177) =7.683**, *p* < .001,** and accounted for approximately **8%** of the variance of mobile **usage** (R^2=.08, Adjusted R^2 =.069). **Mobile usage** is primarily predicted by the gender and followed by Time for education. The raw and standardized regression coefficient of predictors together with their correlation with **mobile usage**, their squared semi-partial correlations, and their structure coefficients are shown in table 4.22. The gender received the strongest weight in model and Time for education received the less weight in model. With the sizeable correlations between the predictors, the unique variance explained by each of the variables indexed by the squared semi-partial correlation was relatively low: The gender and Time for education uniquely accounted for approximately **6%** and **2%** of the **mobile usage**. Inspection of the structure coefficient suggests that, **the gender was a strong predictor of mobile usage and Time for education was a moderate predictor of mobile usage of the higher secondary school students.**

TABLE 4.23

STEPWISE REGRESSION RESULT BETWEEN TOTAL MOBILE USAGE AND ITS SUB SCALES

Model	**B**	**Std. Error**	**Beta**	**Pearson r**	**Sr^2**	**Structure Coefficient**
(Constant)	1.421E-14	.000				
educational	1.000	.000	.522	.854	.180	.854
hobbies	1.000	.000	.284	.677	.057	.677
communicational	1.000	.000	.262	.778	.041	.778
personal	1.000	.000	.224	.705	.034	.705

Note. The dependent variable is **Mobile usage.** **R^2**= 1, Adjusted R^2= 1, Sr^2 is squared semi-partial correlation. * $p < .05$, F (4,175) =0

Table 4.23 shows Educational, hobbies, personal, communicational and total mobile usage were used in a stepwise multiple regression analysis to predict dominant **mobile usage factor**. The correlation of variables is shown in table.4.21 As can be seen correlations with Educational, hobbies, personal, communicational total mobile usage were statistically significant.

The prediction model contained four of the four predictors and was reached in four steps with no variables removed. The model was statistically significant, F (4,175) =0**, *p* < .001,** and accounted for approximately **100%** of the variance of mobile **usage** (R^2=1, Adjusted R^2 =1). **Mobile usage** is primarily predicted by the Educational, hobbies, communicational and Personal factors. The raw and standardized regression coefficient of predictors together with their correlation with **mobile usage**, their squared semi-partial correlations, and their structure coefficients are shown in table-4.23. The Educational factor received the strongest weight in model and followed by hobbies, communicational and Personal. Personal factor received the less weight in model. With the sizeable correlations between the predictors, the unique variance explained by each of the variables indexed by the squared semi-partial correlation was relatively low: The Educational, hobbies, communicational and Personal Factors uniquely accounted for **approximately 18%, 6%,4% and 3%** of the **mobile usage**. Inspection of the structure coefficient suggests that, **the Education was a dominant mobile usage factor and personal was a least mobile usage factor of the higher secondary school students.**

Chapter V

Summary, Findings, Suggestions and Conclusion

CHAPTER V

5.1 SUMMARY

The current investigation Assessed mobile phone usage of higher secondary school students in Cuddalore district, Tamil Nadu. Mobile phone questionnaire constructed and standardized by researcher and guide is used to collect data from 180 higher secondary school students randomly. The scale contains 33 items in 4 dimensions. The collected data were analyzed with help of IBMSPSS23. Statistical techniques like Descriptive analysis, inferential analysis, correlation analysis and regression analysis have been used in this study. The higher secondary school student of mobile phone usage is High. A stepwise regression was carried out to find the predication model for mobile phone usage. The prediction model contained two of the ten predictors and was reached in two steps with eight variables removed. The model was statistically significant, **F (2,177) =7.683, *p* < .001,** and accounted for approximately **8% of the variance of mobile usage (R^2=.08, Adjusted R^2 =.069).** The structure coefficient suggests that, the gender was a strong predictor of mobile usage and Time for education was a moderate predictor of mobile usage of the higher secondary school students.

The prediction model contained four of the four predictors and was reached in four steps with no variables removed. The model was statistically significant, **F (4,175) =0, *p* < .001,** and accounted for approximately **100% of the variance of mobile usage (R^2=1, Adjusted R^2 =1).** The structure coefficient suggests that, the Education was a dominant mobile usage factor and personal was a least mobile usage factor of the higher secondary school students.

5.2 MAJOR FINIDINGS

MOBILE PHONE USAGE OF HIGHER SECONDARY SCHOOL STUDENTS

5.21 DESCRIPTIVE ANALYSIS

- 68.3 % of higher Secondary School Student Mobile Phone usage are High.
- The higher secondary school students mobile phone usage is high (100-132).
- The students whose fathers are farmers and from private organisations use mobile frequently than others.
- The students whose mothers are housewives shows high level of mobile phone usage than others.
- The rural and semi-urban Students Mobile phone usage is more than the others.
- The students whose father's annual income of Rs2.00 Lakhs to 2.5 Lakhs shows high level of Mobile phone usage than others.
- The mother's Nil income shows high level of mobile phone usage than others.
- The male Students Mobile phone usage is more than the female students.
- The students whose fathers have college background shows high level of Mobile phone usage than others.
- The students whose mothers had their school education shows high level of mobile phone usage than others.
- The joint Family Student show high level of Mobile phone usage than the others.
- The Aided school Students shows high level of Mobile phone usage than the others.
- The students who scores 40-49 % of marks in their SSLC exam shows high level of Mobile phone usage than the others.

- The maths and computer science group students show high level of Mobile phone usage than others.
- The students who use their own mobile shows high level of mobile phone usage than others.
- The students who spent 3-4hours with mobile for chatting shows high level of mobile phone usage than others.
- The students who spent 3-4 hours with mobile for education shows high level of mobile phone usage than others.
- The students who have 51-100 Facebook followers shows high level of Mobile phone usage than others.
- The students who known 11-15 learning app shows high level of mobile phone usage.

5.22 INFERENTIAL ANALYSIS

- It is concluded that the Female and Male student do not differ in their personal usage of mobile phone.
- It is concluded that the Female and Male student do not differ in their educational usage of mobile phone
- It is concluded that the Female and Male student differ in their Mobile Phone Usage for Communication.
- It is concluded that the Female and Male student differ in their Mobile Phone Usage for Hobbies.
- It is concluded that the Female and Male student differ in their Mobile Phone Usage for total.

- It is concluded that the mother's nil income and mother's Income student do not differ in their personal usage of mobile phone.
- It is concluded that the mother's No income and mother's Income student do not differ in their educational usage of mobile phone.
- It is concluded that the mother's No income and mother's Income student do not differ in their Mobile Phone Usage for Communication.
- It is concluded that the mother's No income and mother's Income student do not differ in their Mobile Phone Usage for Hobbies.
- It is concluded that the mother's No income and mother's Income student do not differ in their Mobile Phone Usage for total.
- It is concluded that the students with their own mobile phone and without their own mobile phone do not differ in their Personal Usage.
- It is concluded that the students with their own mobile phone and without their own mobile phone do not differ in their Educational Usage.
- It is concluded that the students with their mobile phone and without their own mobile phone differ in their Communicational Usage.
- It is concluded that the students with their mobile phone and without their own mobile phone differ in their Hobbies Usage.
- It is concluded that the students with their own mobile phone and without their own mobile phone do not differ in their Total.
- The students with different father's Occupation do not differ in their personal usage of mobile phone.

- The students with different father’s Occupation do not differ in their educational usage of mobile phone
- The students with different father’s Occupation do not differ in their mobile phone usage for communication.
- The students with different father’s Occupation do not differ in their mobile phone usage for hobbies.
- The students with different father’s Occupation do not differ in their mobile phone usage in total.
- The students with different mother’s qualification do not differ in their personal usage of mobile phone.
- The students with different mother’s qualification do not differ in their educational usage of mobile phone.
- The students with different mother’s qualification do not differ in their mobile phone usage for communication.
- The students with different mother’s qualification do not differ in their mobile phone usage for hobbies.
- The students with different mother’s qualification do not differ in their mobile phone usage in total.
- The students with different locality do not differ in their personal usage of mobile phone.
- The students with different locality do not differ in their educational usage of mobile phone.
- The students with different locality do not differ in their mobile phone usage for communication.
- The students with different locality do not differ in their mobile phone usage for hobbies.

- The students with different locality do not differ in their mobile phone usage in total.
- The students with different father's annual income do not differ in their personal usage of mobile phone.
- The students with different father's annual income do not differ in their educational usage of mobile phone.
- The students with different father's annual income do not differ in their mobile phone usage for communication.
- The students with different father's annual income do not differ in their mobile phone usage for hobbies.
- The students with different father's annual income do not differ in their mobile phone usage in total.
- The students with different father's qualification do not differ in their personal usage of mobile phone.
- The students with different father's qualification do not differ in their educational usage of mobile phone.
- The students with different father's qualification do not differ in their mobile phone usage for communication.
- The students with different father's qualification do not differ in their mobile phone usage for hobbies.
- The students with different father's qualification do not differ in their mobile phone usage in total.
- The students with different mother's qualification do not differ in their personal usage of mobile phone.

- The students with different mother’s qualification differ in their educational usage of mobile phone.
- The students with different mother’s qualification do not differ in their mobile phone usage for communication.
- The students with different mother’s qualification do not differ in their mobile phone usage for hobbies.
- The students with different mother’s qualification differ in their mobile phone usage in total.
- The students with different type of family do not differ in their personal usage of mobile phone.
- The students with different type of family do differ in their educational usage of mobile phone.
- The students with different type of family do not differ in their mobile phone usage for communication.
- The students with different type of family do not differ in their mobile phone usage for hobbies.
- The students with different type of family do not differ in their mobile phone usage in total.
- The students with different type of school differ in their personal usage of mobile phone.
- The students with different type of school do not differ in their educational usage of mobile phone.
- The students with different type of school do not differ in their mobile phone usage for communication.
- The students with different type of school differ in their mobile phone usage for hobbies.

- The students with different type of school do not differ in their mobile phone usage in total.
- The students with different SSLC marks differ in their personal usage of mobile phone.
- The students with different SSLC marks do not differ in their educational usage of mobile phone.
- The students with different SSLC marks do not differ in their mobile phone usage for communication.
- The students with different SSLC marks differ in their mobile phone usage for hobbies.
- The students with different SSLC marks do not differ in their mobile phone usage in total.
- The students with different group do not differ in their personal usage of mobile phone.
- The students with different group do not differ in their educational usage of mobile phone.
- The students with different group do not differ in their mobile phone usage for communication.
- The students with different group differ in their mobile phone usage for hobbies.
- The students with different group do not differ in their mobile phone usage in total.
- The students with different time spent for chatting do not differ in their personal usage of mobile phone.
- The students with different time spent for chatting do not differ in their educational usage of mobile phone.
- The students with different time spent for chatting do not differ in their mobile phone usage for communication.
- The students with different time spent for chatting differ in their mobile phone usage for hobbies.

- The students with different time spent for chatting do not differ in their mobile phone usage in total.
- The students with different time spent for education differ in their personal usage of mobile phone.
- The students with different time spent for education differ in their educational usage of mobile phone.
- The students with different time spent for education do not differ in their mobile phone usage for communication.
- The students with different time spent for education do not differ in their mobile phone usage for hobbies.
- The students with different time spent for education does not differ in their mobile phone usage in total.
- The students with different face book followers do not differ in their personal usage of mobile phone.
- The students with different face book followers do not differ in their educational usage of mobile phone.
- The students with different face book followers differ in their mobile phone usage for communication.
- The students with different face book followers differ in their mobile phone usage for hobbies.
- The students with different face book followers differ in their mobile phone usage in total.
- The students with different known learning app do not differ in their personal usage of mobile phone.

- The students with different known learning app do not differ in their educational usage of mobile phone.
- The students with different known learning app do not differ in their mobile phone usage for communication.
- The students with different known learning app do not differ in their mobile phone usage for hobbies.
- The students with different known learning app do not differ in their mobile phone usage in total.

5.23 CORRELATION ANALYSIS

- It is concluded that there is negative significant relationship between father occupation, gender and Hobbies.
- It is concluded that there is positive significant relationship between father occupation, locality, SSLC mark and own mobile.
- It is concluded that there is negative significant relationship between mother occupation and father annual income.
- It is concluded that there is positive significant relationship between mother occupation, mother annual income and type of family.
- It is concluded that there is negative significant relationship between locality and gender.
- It is concluded that there is positive significant relationship between locality and group.
- It is concluded that there is negative significant relationship between father annual income, mother annual income and type of family.
- It is concluded that there is positive significant relationship between mother annual income and type of family.

- It is concluded that there is negative significant relationship between gender, SSLC mark and own mobile.
- It is concluded that there is positive significant relationship gender, type of school, Facebook followers, communicational, hobbies and total mobile phone usage.
- It is concluded that there is negative significant relationship between father qualification, type of family and group.
- It is concluded that there is positive significant relationship father qualification, mother qualification, type of school and SSLC mark.
- It is concluded that there is positive significant relationship between mother qualification, SSLC mark and Facebook followers.
- It is concluded that there is positive significant relationship between type of family and educational.
- It is concluded that there is negative significant relationship between type of school, group, own mobile and time spend mobile.
- It is concluded that there is positive significant relationship type of school, SSLC mark and known learning app.
- It is concluded that there is negative significant relationship between SSLC mark, group, personal and hobbies.
- It is concluded that there is positive significant relationship SSLC mark and learning app.
- It is concluded that there is negative significant relationship between group, Facebook followers and educational.
- It is concluded that there is positive significant relationship group and own mobile.

- It is concluded that there is negative significant relationship between own mobile, time spend for chatting, Facebook followers, communicational and hobbies.
- It is concluded that there is positive significant relationship between time spend for chatting, Facebook followers, hobbies and total mobile phone usage.
- It is concluded that there is positive significant relationship between time spend for education, known learning app and educational.
- It is concluded that there is positive significant relationship between Facebook followers, communicational, hobbies and total mobile phone usage.
- It is concluded that there is positive significant relationship between known learning app, educational and communicational.
- It is concluded that there is positive significant relationship between personal, educational, communicational, hobbies and total mobile phone usage.
- It is concluded that there is positive significant relationship between educational, communicational, hobbies and total mobile phone usage.
- It is concluded that there is positive significant relationship between communicational, hobbies and total mobile phone usage.
- It is concluded that there is positive significant relationship between hobbies and total mobile phone usage.

5.24 REGRESSION ANALYSIS

- Hence it is concluded the gender was a strong predictor of mobile usage and Time for education was a moderate predictor of mobile usage of the higher secondary school students.

- Hence it is concluded the Education was a dominant mobile usage factor and personal was a least mobile usage factor of the higher secondary school students.

5.3 SUGGESTIONS

Following suggestions are given for future research.

5.3.1 A similar study may undertake to study the mobile usage of College students, D.T. Ed trainers, school teachers, B.Ed. teacher students.

5.3.2 A similar study may undertake to study the mobile usage and its relationship with other factor like Personality, Emotional intelligence, Leadership qualities and Motivation.

5.3.3 Comparative analysis can also be done among English and Tamil medium high schools, higher secondary schools' students.

5.3.4 Comparative analysis can also be done among Urban and Rural high schools, higher secondary schools' students.

5.3.5 Comparative analysis can also be done among D.T. Ed and B.Ed. trainers, School and college teachers.

5.4 RECOMMENDATION

The present study gives a clear cut picture about mobile phone usage of higher secondary school students as related to personal information such as father's occupation, mother's occupation, locality, father's Annual income, mothers Annual income, gender, father qualification mother qualification, type of school, type of family, SSLC marks and their groups. The Researcher suggested the following recommendation for mobile phone usage of higher secondary school students. A mobile phone usage plays a vital role in personal, Educational, Communicational, hobbies and academic achievement of the higher secondary school students. The higher secondary school students use mobile phone highly. The result show that a mobile phone is a very important tool for study as most of the respondents used their phones for study purposes. They use mobile phones primarily for educational purpose rather than personal. The gender and time spent for education was a dominant factor of mobile phone usage of higher secondary school students. so, teachers should give training in

- Online learning
- Web based learning
- Learning apps
- free learning tools
- Assessment techniques
- pros and cons of using internet

These mobile phone technologies will go a long way in supporting students learning. therefore, increasing their academic performance.

5.5 CONCLUSION

The findings of this study, it was concluded that, Boys living in a Joint family with high income background studying Maths and Computer Science and scored low marks use mobile than female students. Mobile usage was preliminarily predicted by male students and those who are spending 3-4 hours on mobile for educational purpose. Educational factors are showing very high influence on mobile phone usage rather than personal, communicational and hobbies. Teachers should guide them in a proper channel to use mobile phone for educational purposes. Teachers should take a greater responsibility in educating the students to adhere to the rules of netiquette. Mobiles are undeniably, convenient, helpful tool for study and can be a weaken source of distraction depending on the attitude and use pattern of a student.

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Appendix

Appendix-I

O.P.R. MEMORIAL COLLEGE OF EDUCATION

Vadalur-607 303

A STUDY ON MOBILE PHONE USAGE IN RELATION TO ACADEMIC PERFORMANCE AMONG HIGHER SECONDARY SCHOOL STUDENTS.

Dear sir/madam,

I have taken up a project work on **“mobile phone usage in relation to academic performance among higher secondary school students”.** In this regard I seek your cooperation and responses. Kindly provide the data asked here and your responses will be used only for this project work.

Thank you

L.Ramalakshmi

Sl.No	**Personal Data**	
1.	Father’s occupation	
2.	Mother’s occupation	
3.	Locality	Rural/urban/semi urban
4.	Father’s Annual income	
5.	Mother’s Annual income	
6.	Gender	Female/male
7.	Father’s qualification	School education/Diploma/college Education
8.	Mother’s qualification	School education/Diploma/college Education
9.	Type of your family	Nuclear/joint/single parent
10.	Type of school	Government/private/Government aided
11.	Marks obtained in 10th standard	
12.	Which group you belongs to?	(1) Maths and computer science (2) Maths and biological science (3) Commerce and computer science (4) Commerce and history (5) Pure science (6) Nursing (7) EMR

Mobile Factors		
13.	Are you having own mobile phone	Yes/No
14.	Time spend for chatting in mobile	0 hours/1-2 hours/3-4 hours
15.	Time spend for education in mobile	0 hours/1-2 hours/3-4 hours
16.	How many followers you have in Facebook	a. 1- 50 b. 51 - 100 c. 101- 150
17.	How many learning apps do you know	a. 1- 5 b. 6 - 10 c. 11 – 15

Sl. no	**USAGE OF MOBILE PHONE**	**SA**	**A**	**NS**	**D**	**SD**
01	I update my **WhatsApp status** daily *எனது **வாட்ஸ்அப் நிலையை** தினமும் புதுப்பிக்கிறேன்*					
02	I listen **music** in my mobile *எனது மொபைலில் **இசையை** கேட்கிறேன்*					
03	I am Watching **latest movies** in my mobile *எனது மொபைலில் **சமீபத்திய திரைப்படங்களைப்** பார்க்கிறேன்*					
04	I like **online shopping** *நான் **ஆன்லைன் ஷாப்பிங்** விரும்புகிறேன்*					
05	I use **net banking** for money transferring *பண பரிமாற்றத்திற்கு நான் **நிகர வங்கியைப்** பயன்படுத்துகிறேன்*					
06	Playing **online games** in mobile make me very happy *மொபைலில் **ஆன்லைன் கேம்களை** விளையாடுவது எனக்கு மிகவும் மகிழ்ச்சியை அளிக்கிறது*					
07	During my **travelling location share** is very useful in mobile *எனது பயண **இருப்பிடப் பங்கு** மொபைலில் மிகவும் பயனுள்ளதாக இருக்கும்*					
08	Watching pictures of my **favorite cine stars** makes me excited *எனக்கு **பிடித்த திரையுலக நட்சத்திரங்கள்** படங்களைப் பார்ப்பது என்னை உற்சாகத்தில் ஆழ்த்துகிறது*					
09	I **book my tickets** for new movies through my mobile *எனது மொபைல் மூலம் புதிய திரைப்படத்திற்கான **டிக்கெட்டுகளை** நான் முன்பதிவு செய்கிறேன்*					
10	I **order food** through app in my mobile *என் மொபைலில் செயலி மூலம் **உணவு ஆர்டர்** செய்கிறேன்*					
11	I am crazy in **tik tok** app in mobile					

	மொபைலில் **டிக் டாக்** பயன்பாட்டில் எனக்கு பைத்தியம்					
12	I take too many **selfies** using my mobile எனது மொபைலைப் பயன்படுத்தி பல **செல்ஃபிக்களை** எடுத்துக்கொள்கிறேன்					
13	I am trying **online exams** through my mobile எனது மொபைல் மூலம் **ஆன்லைன் தேர்வுகளை** முயற்சிக்கிறேன்					
14	I am having knowledge about **GPRS Tracking** ஜிபிஆர்எஸ் கண்காணிப்பு பற்றி எனக்கு அறிவு உள்ளது					
15	I know about the usage of **Bluetooth** in my mobile என் மொபைலில் ப்ளூடூத் பயன்பாடு பற்றி எனக்கு தெரியும்					
16	I am using **skype** in my mobile என் மொபைலில் ஸ்கைப் பயன்படுத்துகிறேன்					
17	I prefer to use **e-mail** in my mobile எனது மொபைலில் மின்னஞ்சலை பயன்படுத்த விரும்புகிறேன்					
18	I am using **live tv app** for watching news and programs in my mobile எனது மொபைலில் செய்திகள் மற்றும் நிகழ்ச்சிகளைப் பார்க்க நேரடி தொலைக்காட்சி பயன்பாட்டைப் பயன்படுத்துகிறேன்					
19	I am using **travel app** through my mobile எனது மொபைல் மூலம் பயண பயன்பாட்டைப் பயன்படுத்துகிறேன்					
20	I **download** science video tutorials and lecturer from famous faculties through my mobile எனது மொபைல் மூலம் பிரபலமான ஆசிரியர்களிடமிருந்து அறிவியல் வீடியோ பயிற்சிகள் மற்றும் விரிவுரையாளரை **பதிவிறக்குகிறேன்**					
21	One can **master** in all subjects with the help of mobile மொபைல் உதவியுடன் ஒருவர் அனைத்து பாடங்களிலும் தேர்ச்சி பெற முடியும்					

22	Learning is very easy, when i use **learning App** நான் கற்றல் பயன்பாட்டை பயன்படுத்தும் போது கற்றல் மிகவும் எளிதானது					
23	**Visual 3D pictures**, easily helps to understand the science காட்சி 3D படங்கள், அறிவியலை எளிதில் புரிந்துகொள்ள உதவுகின்றன					
24	Mobiles can be used in classroom for **technology-based assignment** தொழில்நுட்ப அடிப்படையிலான பணிக்காக மொபைல்களை வகுப்பறையில் பயன்படுத்தலாம்					
25	To clarify the meanings and terms i use always **google search** நான் பயன்படுத்தும் அர்த்தங்கள் மற்றும் நிபந்தனைகளை தெளிவுபடுத்த எப்போதும் google search					
26	Mobiles are helpful to find out the **short route method** in mathematics கணிதத்தில் குறுகிய வழி முறையை கண்டறிய மொபைல்கள் உதவுகின்றன					
27	I clarify my doubts through **e-dictionary** in my mobile எனது சந்தேகங்களை எனது மொபைலில் மின் அகராதி மூலம் தெளிவுபடுத்துகிறேன்					
28	I always use **e-books** through my mobile நான் எப்போதும் எனது மொபைல் மூலம் மின் புத்தகங்களைப் பயன்படுத்துகிறேன்					
29	I am using **SlideShare** in my mobile எனது மொபைலில் ஸ்லைடுஷேரைப் பயன்படுத்துகிறேன்					
30	I am watching **YouTube videos** for educational purpose கல்வி நோக்கங்களுக்காக **YouTube வீடியோக்களை** நான் பார்த்துக் கொண்டிருக்கிறேன்					

31	My **marks are reduced**, due to the usage of mobile *என் **மதிப்பெண்கள்** குறைகிறது, மொபைல் பயன்பாடு காரணமாக*					
32	My **marks were higher** after using mobile *மொபைலை பயன்படுத்திய பிறகு எனது **மதிப்பெண்கள் அதிகம்***					
33	**Book reading** is vanished due to mobile usage *மொபைல் பயன்பாடு காரணமாக **புத்தக வாசிப்பு** மறைந்துவிட்டது*					
34	My language is developing due to **translate app** ***மொழிபெயர்** பயன்பாட்டால் எனது மொழி வளர்ச்சி பெறுகிறது*					
35	Mobiles are useful to convey the message to **a group of people quickly** *மொபைல்கள் செய்திகளை **விரைவாக ஒரு குழுவிற்கு** எடுத்துச் செல்ல பயனுள்ளதாக இருக்கும்*					
36	Mobiles have saved the lives of many people at times of **emergency** *மொபைல்கள் **அவசர காலங்களில்** பலரது உயிரை காப்பாற்றி உள்ளது*					
SA - Strongly Agree; **A** - Agree**;** **NS** - Not Sure; **D** - Disagree; **SD** - Strongly Disagree						

Appendix-II

O.P.R. MEMORIAL COLLEGE OF EDUCATION

Vadalur-607 303

A STUDY ON MOBILE PHONE USAGE IN RELATION TO ACADEMIC PERFORMANCE AMONG HIGHER SECONDARY SCHOOL STUDENTS.

Dear sir/madam,

I have taken up a project work on **“mobile phone usage in relation to academic performance among higher secondary school students”.** In this regard I seek your cooperation and responses. Kindly provide the data asked here and your responses will be used only for this project work.

Thank you

L.Ramalakshmi

Sl.No	**Personal Data**	
1.	Father’s occupation	
2.	Mother’s occupation	
3.	Locality	Rural/urban/semi urban
4.	Father’s Annual income	
5.	Mother’s Annual income	
6.	Gender	Female/male
7.	Father’s qualification	School education/Diploma/college Education
8.	Mother’s qualification	School education/Diploma/college Education
9.	Type of your family	Nuclear/joint/single parent
10.	Type of school	Government/private/Government aided
11.	Marks obtained in 10th standard	
12.	Which group you belongs to?	(1) Maths and computer science (2) Maths and biological science (3) Commerce and computer science (4) Commerce and history (5) Pure science (6) Nursing (7) EMR

Mobile Factors		
13.	Are you having own mobile phone	Yes/No
14.	Time spend for chatting in mobile	0 hours/1-2 hours/3-4 hours
15.	Time spend for education in mobile	0 hours/1-2 hours/3-4 hours
16.	How many followers you have in Facebook	a. 1- 50 b. 51 - 100 c. 101- 150
17.	How many learning apps do you know	a. 1- 5 b. 6 - 10 c. 11 – 15

Sl. no	USAGE OF MOBILE PHONE	SA	A	NS	D	SD
01	I update my **WhatsApp status** daily *எனது **வாட்ஸ்அப் நிலையை** தினமும் புதுப்பிக்கிறேன்*					
02	I listen **music** in my mobile *எனது மொபைலில் **இசையை** கேட்கிறேன்*					
03	I am Watching **latest movies** in my mobile *எனது மொபைலில் **சமீபத்திய திரைப்படங்களைப்** பார்க்கிறேன்*					
04	I like **online shopping** *நான் **ஆன்லைன் ஷாப்பிங்** விரும்புகிறேன்*					
05	I use **net banking** for money transferring *பண பரிமாற்றத்திற்கு நான் **நிகர வங்கியைப்** பயன்படுத்துகிறேன்*					
06	Playing **online games** in mobile make me very happy *மொபைலில் **ஆன்லைன் கேம்களை** விளையாடுவது எனக்கு மிகவும் மகிழ்ச்சியை அளிக்கிறது*					
07	During my **travelling location share** is very useful in mobile *எனது பயண **இருப்பிடப் பங்கு** மொபைலில் மிகவும் பயனுள்ளதாக இருக்கும்*					
08	Watching pictures of my **favorite cine stars** makes me excited *எனக்கு **பிடித்த திரையுலக நட்சத்திரங்கள்** படங்களைப் பார்ப்பது என்னை உற்சாகத்தில் ஆழ்த்துகிறது*					
09	I **book my tickets** for new movies through my mobile *எனது மொபைல் மூலம் புதிய திரைப்படத்திற்கான **டிக்கெட்டுகளை** நான் முன்பதிவு செய்கிறேன்*					
10	I am crazy in **tik tok** app in mobile *மொபைலில் **டிக் டாக்** பயன்பாட்டில் எனக்கு பைத்தியம்*					
11	I take too many **selfies** using my mobile *எனது மொபைலைப் பயன்படுத்தி பல **செல்ஃபிக்களை** எடுத்துக்கொள்கிறேன்*					
12	I am trying **online exams** through my mobile *எனது மொபைல் மூலம் **ஆன்லைன் தேர்வுகளை** முயற்சிக்கிறேன்*					
13	I am having knowledge about **GPRS Tracking** *ஜிபிஆர்எஸ் கண்காணிப்பு பற்றி எனக்கு அறிவு உள்ளது*					
14	I know about the usage of **Bluetooth** in my mobile *என் மொபைலில் ப்ளூடூத் பயன்பாடு பற்றி எனக்கு தெரியும்*					
15	I am using **skype** in my mobile *என் மொபைலில் ஸ்கைப் பயன்படுத்துகிறேன்*					

16	I prefer to use **e-mail** in my mobile எனது மொபைலில் மின்னஞ்சலை பயன்படுத்த விரும்புகிறேன்					
17	I am using **live tv app** for watching news and programs in my mobile எனது மொபைலில் செய்திகள் மற்றும் நிகழ்ச்சிகளைப் பார்க்க நேரடி தொலைக்காட்சி பயன்பாட்டைப் பயன்படுத்துகிறேன்					
18	I am using **travel app** through my mobile எனது மொபைல் மூலம் பயண பயன்பாட்டைப் பயன்படுத்துகிறேன்					
19	I **download** science video tutorials and lecturer from famous faculties through my mobile எனது மொபைல் மூலம் பிரபலமான ஆசிரியர்களிடமிருந்து அறிவியல் வீடியோ பயிற்சிகள் மற்றும் விரிவுரையாளரை **பதிவிறக்குகிறேன்**					
20	One can **master** in all subjects with the help of mobile மொபைல் உதவியுடன் ஒருவர் அனைத்து பாடங்களிலும் தேர்ச்சி பெற முடியும்					
21	Learning is very easy, when i use **learning App** நான் கற்றல் பயன்பாட்டை பயன்படுத்தும் போது கற்றல் மிகவும் எளிதானது					
22	**Visual 3D pictures**, easily helps to understand the science காட்சி 3D படங்கள், அறிவியலை எளிதில் புரிந்துகொள்ள உதவுகின்றன					
23	Mobiles can be used in classroom for **technology-based assignment** தொழில்நுட்ப அடிப்படையிலான பணிக்காக மொபைல்களை வகுப்பறையில் பயன்படுத்தலாம்					
24	To clarify the meanings and terms i use always **google search** நான் பயன்படுத்தும் அர்த்தங்கள் மற்றும் நிபந்தனைகளை தெளிவுபடுத்த எப்போதும் google search					
25	Mobiles are helpful to find out the **short route method** in mathematics கணிதத்தில் குறுகிய வழி முறையை கண்டறிய மொபைல்கள் உதவுகின்றன					
26	I clarify my doubts through **e-dictionary** in my mobile எனது சந்தேகங்களை எனது மொபைலில் மின் அகராதி மூலம் தெளிவுபடுத்துகிறேன்					
27	I always use **e-books** through my mobile					

	நான் எப்போதும் எனது மொபைல் மூலம் மின் புத்தகங்களைப் பயன்படுத்துகிறேன்					
28	I am using **SlideShare** in my mobile எனது மொபைலில் ஸ்லைடுஷேரைப் பயன்படுத்துகிறேன்					
29	I am watching **YouTube videos** for educational purpose கல்வி நோக்கங்களுக்காக **YouTube வீடியோக்களை** நான் பார்த்துக் கொண்டிருக்கிறேன்					
30	My **marks were higher** after using mobile மொபைலை பயன்படுத்திய பிறகு எனது **மதிப்பெண்கள் அதிகம்**					
31	My language is developing due to **translate app** **மொழிபெயர்** பயன்பாட்டால் எனது மொழி வளர்ச்சி பெறுகிறது					
32	Mobiles are useful to convey the message to **a group of people quickly** மொபைல்கள் செய்திகளை **விரைவாக ஒரு குழுவிற்கு** எடுத்துச் செல்ல பயனுள்ளதாக இருக்கும்					
33	Mobiles have saved the lives of many people at times of **emergency** மொபைல்கள் **அவசர காலங்களில்** பலரது உயிரை காப்பாற்றி உள்ளது					
SA - Strongly Agree; **A** - Agree**; NS** - Not Sure; **D** - Disagree; **SD** - Strongly Disagree						

First Paper: *என்ன ஆச்சரியம்?* **"Enna Aacharyam !" [1949]**

ஓர் அறிமுகம்

பேராசிரியர்

ந சுப்பு ரெட்டியார்

Books Published : **135 + 1**
Papers Published : **200** [Tamil 173 + English 27]
Endowments established: **10**
Endowment Lectures : **12**
Awards received: **8**
Prizes won : **14**
Titles conferred : **8**

Masterpieces:

1) Tamil Payitrum Murai [1957]
2) Religion & Philosophy of Naalayira Divyap-pirabhandham with special reference to Nammalwar [English][His PhD thesis] [1977]
3) Kalvi Ulaviyal Kotpaadukal [1989]
4) Vainava Selvam [1995]

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